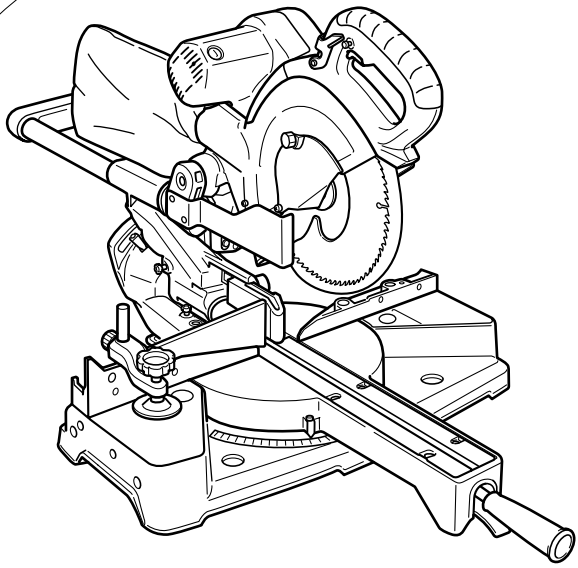
HITACHI

Slide Compound Miter Saw
Model C 10FSH (Laser Marker Equipment)
C 10FSB

Handling instructions



NOTE:
Before using this Power Tool, carefully read through these HANDLING INSTRUCTIONS to ensure efficient, safe operation. It is recommended that these INSTRUCTIONS be kept readily available as an important reference when using this power tool.

Hitachi Koki

GENERAL OPERATIONAL PRECAUTIONS

WARNING!

When using power tools basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following.

Read all these instructions before attempting to operate this product and save these instructions.

1. Keep work area clean. Cluttered areas and benches invite injuries.
2. Consider work area environment. Do not expose power tools to rain. Do not use power tools in damp or wet locations. Keep work area well lit.
   Do not use tools in the presence of flammable liquids or gases.
   Power tools produce sparks during operation. They also spark when switching ON/OFF. Never use power tools in dangerous sites containing lacquer, paint, benzine, thinner, gasoline, gases, adhesive agents, and other materials which are combustible or explosive.
3. Guard against electric shock. Avoid body contact with earthed or grounded surfaces. For example; pipes, radiators, refrigerator enclosures.
4. Keep children and infirm persons away. Do not let visitors touch the tool or extension cord. All visitors should be kept away from work area.
5. Store idle tools. When not in use, tools should be stored in a dry, high or locked-up place, out of reach of children and infirm persons.
6. Do not force the tool. It will do the job better and safer at the rate for which it was intended.
7. Use the right tool. Do not force small tools to do the job of a heavy duty tool. Do not use tools for purposes not intended; for example do not use circular saws to cut tree limbs or logs.
8. Dress properly. Do not wear loose clothing or jewelry. They can be caught in moving parts. Non-skid footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
9. Use protective equipment. Use safety glasses. Use face or dust mask if cutting operations create dust.
10. Connect dust extraction equipment.
    If device are provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.
11. Do not abuse the cord. Never yank the cord to disconnect it from the receptacle. Keep the cord away from heat, oil and sharp edges.
12. Secure work. Where possible use clamps or a vise to hold the work. It is safer than using your hand.
13. Do not overreach. Keep proper footing and balance at all times.
14. Maintain tools with care. Keep cutting tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged have them repaired by an authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.

15. Disconnect tools. When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.
16. Remove adjusting keys and wrenches. Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
17. Avoid unintentional starting. Do not carry plugged-in tool with finger on switch. Ensure switch is in “off” position when plugging in.
18. Use outdoor extension leads. When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.
19. Stay alert. Watch what you are doing. Use common sense. Do not operate the tool when you are tired.
20. Check damaged parts. Before further use of tool, it should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated in this handling instructions. Have defective switches replaced by an authorized service center. Do not use the tool if the switch does not turn it on and off.
21. Do not use power tools for applications other than those specified in the handling instructions.
22. Warning
    The use of any accessory or attachment other than one recommended in this handling instructions or the HITACHI catalog may present a risk of personal injury.
23. Repairing must be done only by authorized service facility. Manufacturer is not responsible for any damages and injuries due to the repair by the unauthorized persons as well as the mishandling of the tool.
24. Have your tool repaired by a qualified person. This power tool complies with the relevant safety rules. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.
25. To ensure the designed operational integrity of power tools, do not remove installed covers or screws.
26. Do not touch movable parts or accessories unless the power source has been disconnected.
27. Use your tool at lower input than specified on the nameplate; otherwise, the finish may be spoiled and working efficiency reduced due to motor overload.
28. Do not wipe plastic parts with solvent. Solvents such as gasoline, thinner, benzine, carbon tetrachloride, alcohol, may damage and crack plastic parts. Do not wipe them with such solvent. Clean plastic parts with a soft cloth lightly dampened with soapy water.
29. Use only original HITACHI replacement parts.
30. This tool should only be disassembled for replacement of carbon brushes.
31. The exploded assembly drawing on this handling instructions should be used only for authorized service facility.
32. Never cut ferrous metals or masonry.

PRECAUTION ON USING SLIDE COMPOUND MITER SAW

1. Review this Manual and familiarize yourself with the safety rules and operating instructions for this POWER TOOL before attempting to use it.
2. Always confirm that the POWER TOOL is clean before using it.
3. Always wear snug-fitting clothing, non-skid footwear (preferably with steel toes) and eye protection when operating the POWER TOOL.
4. Always handle the POWER TOOL carefully. If the POWER TOOL falls or strikes against a hard object, it might become deformed or cracked or sustain other damage.
5. Always cease operating the saw at once, if you notice any abnormality whatsoever.
6. Always confirm that all components are mounted properly and securely before using the tool.
7. When replacing the saw blade, always confirm that the rpm rating of the new blade is correct for use on this tool.
8. Always shut off the power and wait for the saw blade to completely stop rotating before undertaking any maintenance or adjustments.
9. During slide cutting, always push the saw blade away from the operator.
10. During miter or bevel cutting, always wait for the rotation of the blade to stop completely before lifting the saw blade.
11. Always make a trial run first before attempting any new use of the saw.
12. Always handle the saw blade with care when dismounting and mounting it.
13. Always confirm that the workpiece is free of nails or other foreign objects before beginning a cut.
14. Always keep your hands out of the path of the saw blade.
15. Always confirm that the lower guards are in the proper places before using the saw.
16. Always confirm that the lower guards do not obstruct the sliding motion of the saw before attempting slide cutting.
17. Inspect the tool power cords periodically.
18. Always confirm that the motor air vents are fully open before using the tool.
19. Always wait until the motor has reached full speed before starting a cut.
20. Never use the POWER TOOL for applications not specified in the instruction manual.
21. Never operate the tool while wearing loose clothing, a necktie or jewelry, or while your hair is uncovered, to protect against getting caught in the moving machinery.
22. Never remove any safety devices or blade guards; use of the tool without them would be hazardous.
23. Never lock the lower guards; always confirm that it slides smoothly before using the tool.
24. Never damage the power cord of the tool.
25. Never attempt to move a plugged-in POWER TOOL while your finger is on the starting switch.
26. Never use the POWER TOOL near flammable liquids or gases because sparking can cause an explosion.
27. Never clean plastic components with solvents because the plastic may dissolve.
28. Never raise the saw blade from the workpiece until it has first come to a complete stop.
29. When slide cutting, never pull the handle toward the operator, since this could cause the saw blade to kick up from the workpiece. Always push the handle away from the operator in a single, smooth motion.

NAME OF PARTS

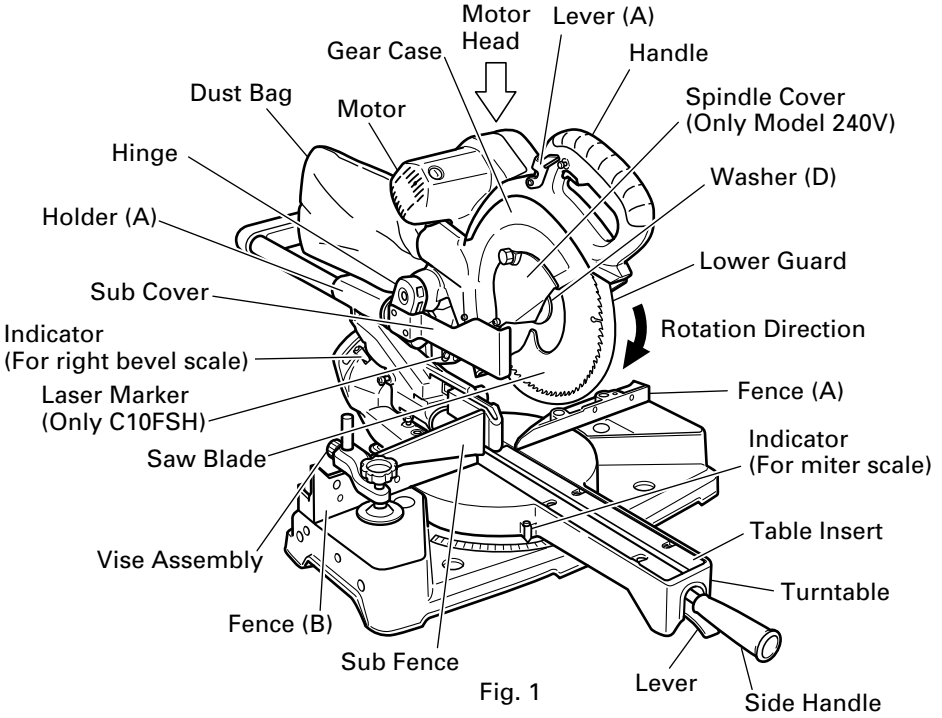


Fig. 1

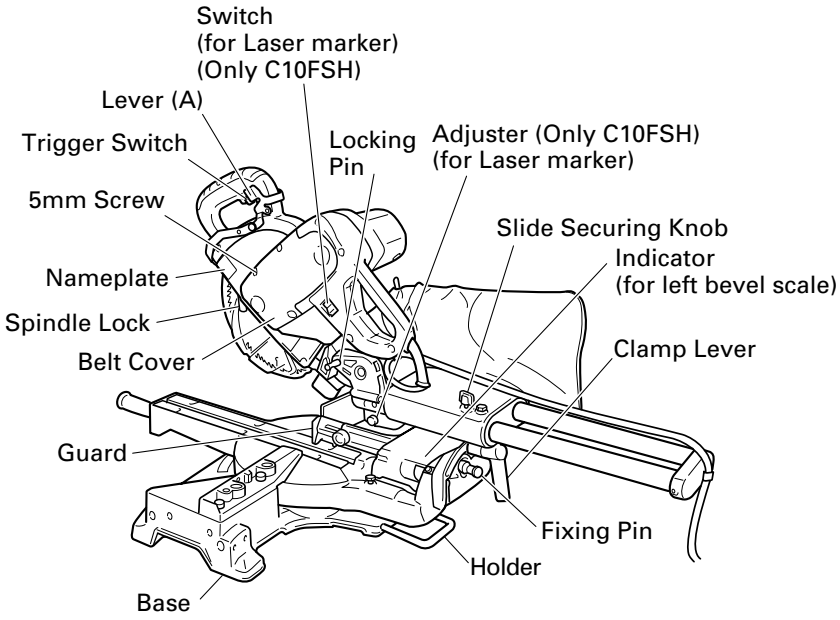


Fig. 2

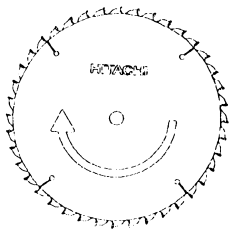
SPECIFICATIONS

Item	Model	C10FSH / C10FSB				
Motor	Type	Series commutator motor				
	Power source	Single-phase AC 50Hz				
	Voltage (Volts)	(230V, 240V) ∿				
	Power input	1450W				
Laser Marker (Only Model C10FSH)	Maximum output	<1mW CLASS II Laser Product				
	Wave length	400~700 nm				
	Laser medium	Laser Diode				
Applicable saw blade		Outside Dia. 262mm (10") Hole Dia. 25.4mm (1") or 30mm (1-3/16") (Only Model 240V)				
No load speed		3800/min				
Max. sawing dimension		Head	Turntable	Max. sawing dimension		
	Miter	0	0	Max. Height Max. Width or * Max. Height Max. Width	88mm 312mm 91mm 300mm	(3-15/32") (12-9/32") (3-19/32") (11-13/32")
		0	Left 45° or Right 45°	Max. Height Max. Width or * Max. Height Max. Width With aux. board	88mm 218mm 91mm 200mm 10mm	(3-15/32") (8-19/32") (3-19/32") (7-7/8") (13/32")
		0	Right 57°	Max. Height Max. Width or * Max. Height Max. Width With aux. board	88mm 165mm 91mm 150mm 10mm	(3-15/32") (6-1/2") (3-19/32") (5-29/32") (13/32")
	Bevel	Left 45°	0	Max. Height Max. Width or * Max. Height Max. Width With aux. board	56mm 305mm 61mm 290mm 10mm	(2-7/32") (12") (2-13/32") (11-13/32") (13/32")
		Rigth 45°	0	Max. Height Max. Width or * Max. Height Max. Width With aux. board	31mm 305mm 36mm 290mm 10mm	(1-7/32") (12") (1-13/32") (11-13/32") (13/32")
	Compound	Left 45°	Left 45° or Right 45°	Max. Height Max. Width or * Max. Height Max. Width With aux. board	56mm 218mm 61mm 200mm 10mm	(2-7/32") (8-19/32") (2-13/32") (7*7/8") (13/32")
		Right 45°	Left 31°	Max. Height Max. Width or * Max. Height Max. Width With aux. board	31mm 260mm 36mm 248mm 10mm	(1-7/32") (10-7/32") (1-13/32") (9-3/4") (13/32")
		Right 45°	Right 45°	Max. Height Max. Width or * Max. Height Max. Width With aux. board	31mm 218mm 36mm 200mm 10mm	(1-7/32") (8-19/32") (1-13/32") (7-7/8") (13/32")
Miter sawing range		Left 0° – 45° Right 0° – 57°				
Bevel sawing range		Left 0° – 45° Right 0° – 45°				
Compound sawing range		Left (Bevel) 0° – 45°, Left and Right (Miter) 0° – 45°				
		Right (Bevel) 0° – 45°, Left (Miter) 0° – 31°, Right (Miter) 0° – 45°				
Net weight		19.5kg (43 lbs.)				
Cord		2 Conductor type cable 1.8m (6ft.)				

When cutting the workpiece which has the dimension of "*" there might be some possibility of the lower end of the circular saw to touch with the workpiece, even if the motor head is located at the lower limit position. Pay attention when cutting the workpiece. For further details, refer to "PRACTICAL APPLICATIONS" on page 18. Mount the auxiliary board on the fence surface (Refer ( ) the thickness of auxiliary board). Refer to "5. Cutting large workpieces" on page 20 (Fig. 28).

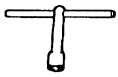
STANDARD ACCESSORIES

① 262mm (10") TCT Saw blade (1 piece)



② Dust bag (1 piece)

④ 10mm BOX wrench (1 piece)



③ Vise Assembly w/knob bolt (1 piece)

For how to use, refer to page 18.

⑤ Collar
Outside Dia. 25.4mm (1") (1 piece)
Outside Dia. 30mm (1-3/16") (1 piece) (Only model 240V)

For how to use, refer to page 29.

Fig. 3

OPTIONAL ACCESSORIES...sold separately

① Extension Holder and Stopper
② Saw blade 255mm (10") TCT Saw blade (Total teeth:72)
③ Sub Fence (A)
④ Crown molding Vise Ass'y (Include Crown molding Stopper (L))
⑤ Crown molding Stopper (L)
⑥ Crown molding Stopper (R)

NOTE: Accessories are subject to change without any obligation on the part of the HITACHI.

APPLICATIONS

Wood and aluminum sash.

PREPARATION BEFORE OPERATION

Make the following preparations before operating the power tool:

1. Installation

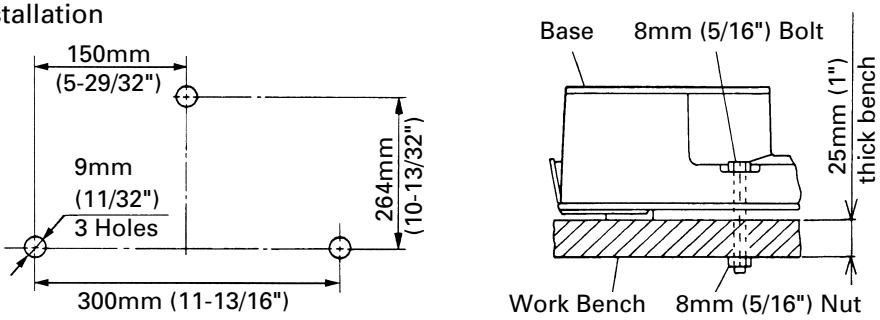
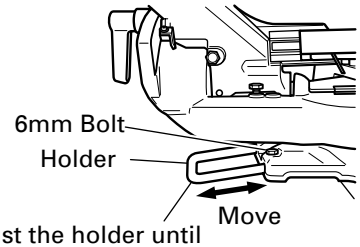


Fig. 4

Attach the power tool to a level, horizontal work bench in accordance with Fig. 4. Select 8mm (5/16") diameter bolts suitable in length for the thickness of the work bench. Bolt length should be at least 40mm (1-9/16") plus the thickness of the work bench. For example, use 65mm (2-9/16") or larger bolts for a 25mm (1") thick work bench. The holder attached to the rear of the base helps stabilize the power tool.



Adjust the holder until its bottom surface contacts the work bench surface.

Fig. 5

Holder adjustment:

Loosen the 6mm bolt with the supplied 10mm box wrench.

Adjust the holder until its bottom surface contacts the work bench surface.

After adjustment, firmly tighten the 6mm bolt.

2. Releasing the locking pin

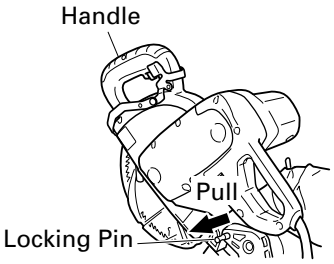


Fig. 6

When the power tool is prepared for shipping, its main parts are secured by a locking pin.

Move the handle slightly so that the locking pin can be disengaged.

NOTE: Lowering the handle slightly will enable you to disengage the locking pin more easily and safely.

The lock position of the locking pin is for carrying and storage only.

3. Installing the dust bag, holder, stopper and vises
   (The holder and stopper are optional accessories.)
   Attach the dust bag and vise assembly as indicated in Fig. 1 and Fig. 2.

BEFORE USING

1. Make sure the power source is appropriate for the tool.

   WARNING: Never connect the power tool unless the available AC power source is of the same voltage as that specified on the nameplate of the tool. Never connect this power tool to a DC power source.

2. Make sure the trigger switch is turned OFF.

   WARNING: If the power cord is connected to the power source with the trigger switch turned ON the power tool will start suddenly and can cause a serious accident.

3. Check the saw blade for visible defects.
   Confirm that the saw blade is free of cracks or other visible damage.
4. Confirm that the saw blade is attached securely to the power tool.
   Using the supplied 10mm box wrench, tighten the bolt on the saw blade spindle to secure the saw blade.
   For details, see Fig. 50-a, Fig. 50-b , Fig. 50-c and Fig. 51 in the section on "SAW BLADE MOUNTING AND DISMOUNTING".
5. Check to see that the lower guard operates smoothly

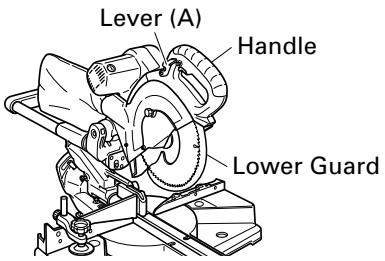


Fig. 7

CAUTION

- ○ This slide compound miter saw is equipped with a saw head lock as safety device.
- ○ To lower the saw head to cut, the lock must be released by pressing the lever (A) with your thumb.

(1) When you push down the handle while pushing the lever (A), check that the lower guard revolves smoothly (Fig. 7).
(2) Next, check that the lower guard returns to the original position when the handle is raised.

WARNING: NEVER OPERATE THE POWER TOOL if the lower guard does not function smoothly.

6. Confirm the position of the spindle lock before using the tool.
   After installing the saw blade, confirm that the spindle lock has been returned to the retract position before using the power tool (see Fig. 2).

7. Check the lower limit position of the Saw Blade.
   Although it was adjusted before shipment, carefully check the height of the saw blade. Confirm that the saw blade can be lowered 10mm to 11mm (13/32" to 7/16") below the table insert. For details, see the section on “Checking the saw blade lower limit position”.
8. Check the Power Receptacle.
   To prevent overheating, accidental stopping or intermittent operation, confirm that the power cord plug fits properly in the electrical receptacle and does not fall out after it is inserted. Repair or replace the receptacle if it is faulty.
9. Confirm the tool’s power cord is not damaged.
   Repair or replace the power cord if an inspection indicates that it is damaged.

AFTER CONNECTING THE POWER PLUG TO AN APPROPRIATE AC POWER SOURCE, CHECK THE OPERATION OF THE TOOL AS FOLLOWS:

10. Trial Run
    After confirming that no one is standing behind, the power tool start and confirm that no operating abnormalities exist before attempting a cutting operation.
11. Inspect the rotating stability of the saw blade.
    For precise cutting, rotate the saw blade and check for deflection to confirm that the blade is not noticeably unstable; otherwise vibrations might occur and cause an accident.

BEFORE CUTTING

1. Cutting a groove on the guard

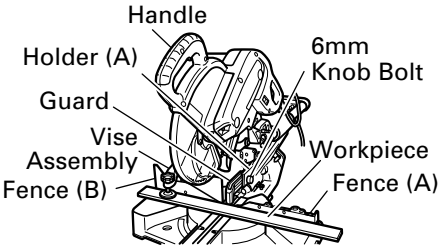
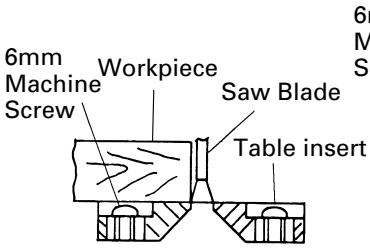


Fig. 8

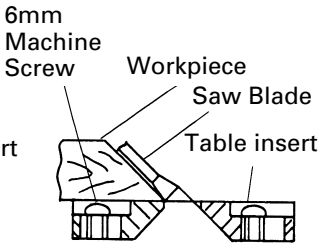
Holder (A) has a guard (see Fig. 8) into which a groove must be cut.
Loosen the 6mm knob bolt to retract the guard slightly. After placing a suitable wooden piece to sit on the fence and the table surfaces, fix it with the vise assembly.
After the switch has been turned on and the saw blade has reached maximum speed, slowly lower the handle to cut a groove on the guard (c).

CAUTION: Do not cut the groove too quickly; otherwise the guard might become damaged.

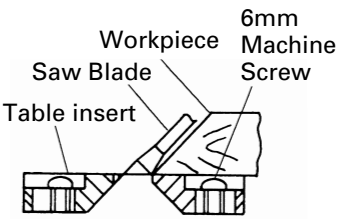
2. Positioning the table insert



[Right angle cutting]
Fig. 9-a



[Left bevel angle cutting]
Fig. 9-b



[Right bevel angle cutting]
Fig. 9-c

Table inserts are installed on the turntable. When shipping the tool from the factory, the table inserts are so fixed that the saw blade does not contact them. The burr of the bottom surface of the workpiece is remarkably reduced, if the table insert is fixed so that the gap between the side surface of the table insert and the saw blade will be minimum. Before using the tool, eliminate this gap in accordance with the following procedure.

(1) Right angle cutting
Loosen the three 6mm machine screws, then secure the left side table insert and temporarily tighten the 6mm machine screws of both ends. Then fix a workpiece (about 200mm (7-7/8") wide) with the vise assembly and cut it off. After aligning the cutting surface with the edge of the table insert, securely tighten the 6mm machine screws of both ends. Remove the workpiece and securely tighten the 6mm center machine screw. Adjust the right hand table insert in the same way.

(2) Left and right bevel angle cutting
Adjust the table insert in the manner shown in Fig. 9-b and Fig. 9-c following the same procedure for right angle cutting.

CAUTION: After adjusting the table insert for right angle cutting, the table insert will be cut to some extent if it is used for bevel angle cutting.
When bevel cutting operation is required, adjust the table insert for bevel angle cutting.

3. Checking the saw blade lower limit position

Check that the saw blade can be lowered 12mm to 13mm (15/32" to 1/2") below the table insert as shown in Fig. 10-a.

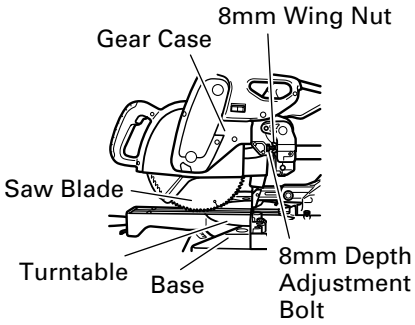


Fig. 10-a

When you replace a saw blade with a new one, adjust the lower limit position so that the saw blade will not cut the turntable or complete cutting cannot be done.

To adjust the lower limit position of the saw blade, follow the procedures (1) to (4) indicated below. (Fig. 10-b)

Furthermore, when changing the position of a 8mm depth adjustment bolt that serves as a lower limit position stopper of the saw blade, it becomes necessary to shift the position of a 8mm hexagon socket set screw that is in the screw hole for the 8mm depth adjustment bolt that serves as the stopper.

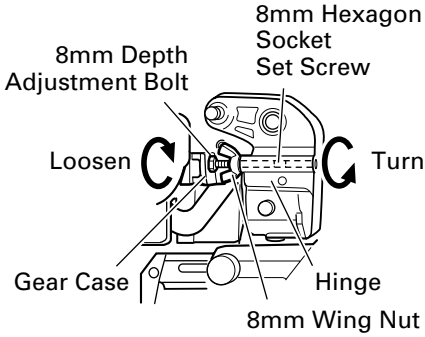


Fig. 10-b

(1) Loosen the 8mm wing nut.

(2) Insert your 6mm hexagon bar wrench from behind of the tool and turn the 8mm hexagon socket set screw to the left (counterclockwise) as viewed from behind of the tool.

(3) Turn the 8mm depth adjustment bolt, change the height where the bolt head and the gear case contacts, and adjust the lower limit position of the saw blade. One turn of the 8mm depth adjustment bolt changes the lower limit position of the saw blade by about 8mm (5/16"), and this information can be used as a rough guide.

(4) Turn the 8mm hexagon socket set screw to the right (clockwise) as viewed from behind of the tool, and let it softly contact the tip of the 8mm depth adjustment bolt.

4. Lower limit position of saw blade when cutting a large workpiece

NOTE: When cutting a workpiece exceeding 88mm (3-15/32") in height in right-angle cutting or 56mm (2-7/32") in left bevel angle cutting or 31mm (1-7/32") in right bevel angle cutting, adjust the lower limit position so that the base of the motor head (see Fig. 10-a) will not come in contact with the workpiece.

To adjust the lower limit position of the saw blade, follow the procedures (1) to (3) shown in Fig. 10-a.

(1) Loosen the 8mm wing nut so that the 8mm depth adjustment bolt can be turned by hand.

(2) Lower the motor head, and thrun the 8mm depth adjustment bolt by hand and make adjustments so that there can be a clearance of 2mm to 3mm (3/32" to 1/8") between the lower limit position of the motor head and the top of the workpiece at the saw blade's lower limit position (where the head of the 8mm depth adjustment bolt contacts the gear case.

(3) After adjustment, turn the 8mm wing nut until it contacts the Hinge (see Fig. 10-b), and fully tighten it.

5. Confirmation for use of sub fence

WARNING: In the case of left bevel cutting, turn the sub fence counterclockwise. Unless it is turned counterclockwise, the main body or saw blade may contact the sub fence, resulting in an injury.

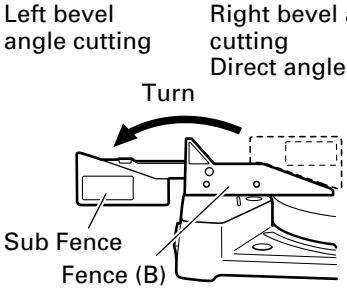


Fig. 11

This power tool is Equipped with a sub fence.
In the case of direct angle cutting and right bevel angle cutting, use the sub fence. Then, you can realize stable cutting of the material with a wide back face.
In the case of left bevel cutting, raise the sub fence up as illustrated in Fig. 11 and then turn it counterclockwise.

6. Oblique angle

Before the power tool is shipped from the factory, it is adjusted for 0°, right angle, left 45° bevel cutting angle and right 45° bevel cutting angle with the 8mm bolt (A), 8mm bolt (B) and the 8mm bolt (C).
When changing the adjustment, change the height of the 8mm bolt (A), 8mm bolt (B) or the 8mm bolt (C) by turning them.
When changing the bevel angle to the right 45°, pull the fixing pin on the direction shown in Fig. 12-a and incline the motor head to the right.
When adjusting the motor head to 0°, always return the fixing pin to its initial position as shown in Fig. 12-b.

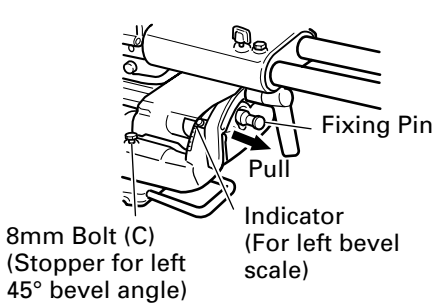


Fig. 12-a

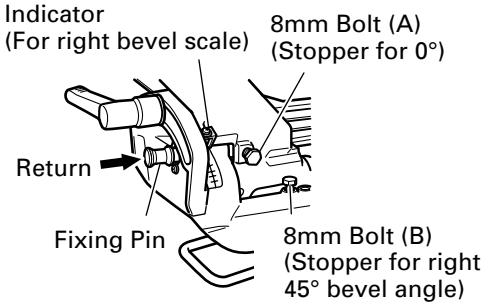


Fig. 12-b

7. Securing the workpiece

WARNING: Always clamp or vise to secure the workpiece to the fence; otherwise the workpiece might be thrust from the table and cause bodily harm.

8. Installing the holders ... (Optional accessory)

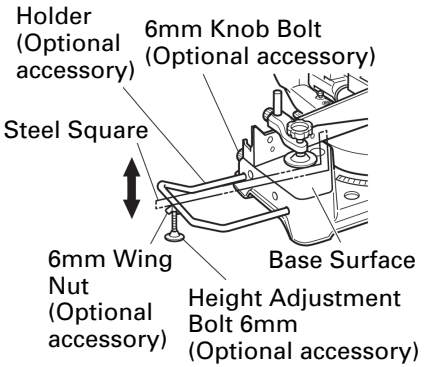


Fig. 13

The holders help keep longer workpieces stable and in place during the cutting operation.

(1) As indicated in Fig. 13, use a steel square for aligning the upper edge of the holders with the base surface.
Loosen the 6mm wing nut. Turn a height adjustment bolt 6mm, and adjust the height of the holder.

(2) After adjustment, firmly tighten the wing nut and fasten the holder with the 6mm knob bolt (optional accessory). If the length of Height Adjustment Bolt 6mm is insufficient, spread a thin plate beneath. Make sure the end of Height Adjustment Bolt 6mm does not protrude from the holder.

9. Stopper for precision cutting ... (Stopper and holder are optional accessory)

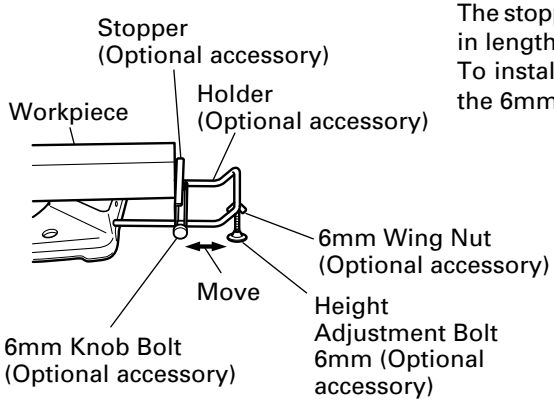


Fig. 14

The stopper facilitates continuous precision cutting in lengths of 280mm to 450mm (11" to 17-3/4").
To install the stopper, attach it to the holder with the 6mm knob bolt as shown in Fig. 14.

10. Confirmation for use of sub fence (A)...(Optional accessory)

WARNING: In the case of right bevel cutting, remove the sub fence (A). Supposing it is not able to remove it, It will contact the blade or some part of the tool, causing in serious injury to operator.

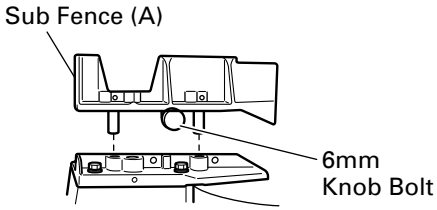


Fig. 15

In the case of direct angle cutting and angle cutting, use the sub fence (A). The sub fence (A) can be installed on the right side of the guide fence. Insert the rods of the sub fence (A) into the holes in the guide fence. Tighten the 6mm knob bolt which come with the sub fence (A) to secure the sub fence (A). Then, you can realize stable cutting of the material with a wide back face.

11. Using an ink line

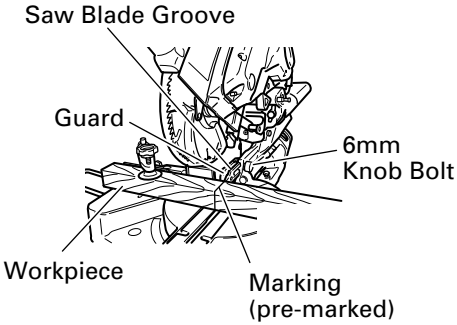


Fig. 16

(1) Right angle cutting
Loosen the 6mm knob bolt and contact the tip of the guard with the workpiece.
Aligning the ink line on the workpiece with the groove of the guard, the workpiece is cut on the ink line (Fig. 16).

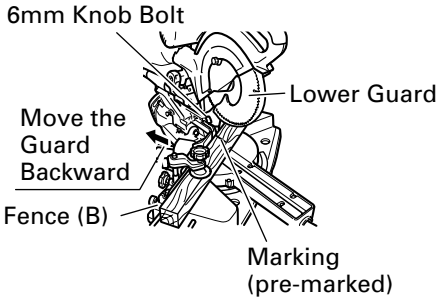


Fig. 17

(2) Miter cutting and compound cutting
(Miter cutting + bevel cutting)
Upon lowering the motor section, the lower guard is raised and the saw blade appears.
Align the ink line with the saw blade (Fig. 17).

CAUTION: In some arrangements when the turntable is rotated, the guard projects from the fence surface. Loosen the 6mm knob bolt and push the guard to the retracted position. Never lift the lower guard while the saw blade is rotating. When cutting at an angle of 35° to the right or more, please slide the guard to the rear.
The guard and sub-fence will not only make contact and adversely affect cutting accuracy, this could also result in damage to the guard.

12. Position adjustment of laser line (Only Model C10FSH)

WARNING:
* **Make sure before plugging the power plug into the receptacle that the main body and the laser marker are turned off.**
* **Exercise utmost caution in handling a switch trigger for the position adjustment of the laser line, as the power plug is plugged into the receptacle during operation.**
  If the switch trigger is pulled inadvertently, the saw blade can rotate and result in unexpected accidents.
* **Do not remove the laser marker to be used for other purposes.**

CAUTION:

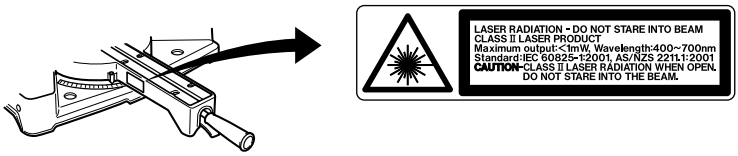

LASER RADIATION - DO NOT STARE INTO BEAM
CLASS II LASER PRODUCT
Maximum output:<1mW, Wavelength:400~700nm
Standard:IEC 60825-1:2001, AS/NZS 2211.1:2001
CAUTION-CLASS II LASER RADIATION WHEN OPEN.
DO NOT STARE INTO THE BEAM.

Fig. 18

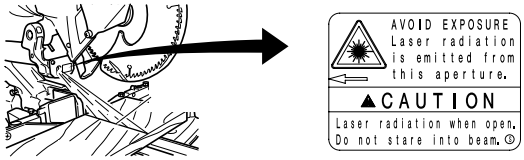


Fig. 19

* **Laser radiation- Do not stare into beam.**
* **Laser radiation on work table. Do not stare into beam.**
  If your eye is exposed directly to the laser beam, it can be hurt.
* **Do not dismantle it.**
* **Do not give strong impact to the laser marker (main body of tool); otherwise, the position of a laser line can go out of order, resulting in the damage of the laser marker as well as a shortened service life.**
* **Keep the laser marker lit only during a cutting operation. Prolonged lighting of the laser marker can result in a shortened service life.**
* **Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.**

NOTE:
* **Perform cutting by overlapping the ink line with the laser line.**
* **When the ink line and the laser line are overlapped, the strength and weakness of light will change, resulting in a stable cutting operation because you can easily discern the conformity of lines. This ensures the minimum cutting errors.**
* **In outdoor or near-the-window operations, it may become difficult to observe the laser line due to the sunlight. Under such circumstances, move to a place that is not directly under the sunlight and engage in the operation.**
* **Do not tug on the cord behind the motor head or hook your finger, wood and the like around it; otherwise, the cord may come off and the laser marker may not be lit up.**

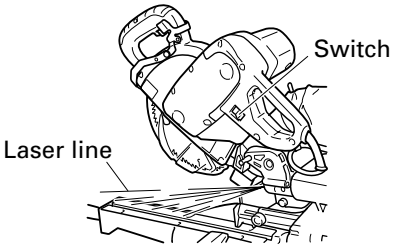


Fig. 20

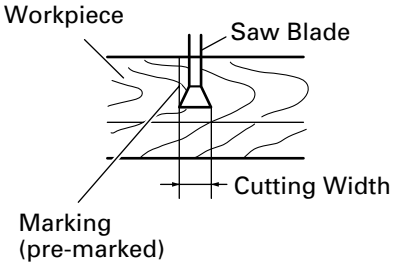


Fig. 21

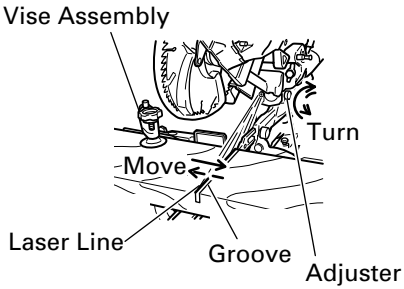


Fig. 22

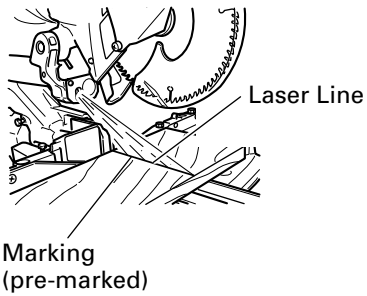


Fig. 23

Ink lining can be easily made on this tool to the laser marker. A switch lights up the laser marker. (Fig. 20)
Depending upon your cutting choice, the laser line can be aligned with the left side of the cutting width (saw blade) or the ink line on the right side.
The laser line is adjusted to the width of the saw blade at the time of factory shipment. Adjust the positions of the saw blade and the laser line taking the following steps to suit the use of your choice.

(1) Light up the laser marker and make a groove of about 5mm (3/16") deep on the workpiece that is about 20mm (25/32") in height and 150mm (5-29/32") in width. Hold the grooved workpiece by vise as it is and do not move it. For grooving work, refer to "11.Groove cutting procedures" on page 27.

(2) Then, turn the adjuster and shift the laser line. (If you turn the adjuster clockwise, the laser line will shift to the right and if you turn it counterclockwise, the laser line will shift to the left.) When you work with the ink line aligned with the left side of the saw blade, align the laser line with the left end of the groove. (Fig. 22) When you align it with the right side of the saw blade, align the laser line with the right side of the groove.

(3) After adjusting the position of the laser line, draw a right-angle ink line on the workpiece and align the ink line with the laser line. When aligning the ink line, slide the workpiece little by little and secure it by vise at a position where the laser line overlaps with the ink line. Work on the grooving again and check the position of the laser line. If you wish to change the laser line's position, make adjustments again following the steps from (1) to (3).

NOTE: Check and make sure on a periodic basis if the position of the laser line is in order. As regards the checking method, draw a right-angle ink line on the workpiece with the height of about 20mm (25/32") and the width of 150mm (5-29/32"), and check that the laser line is in line with the ink line [The deviation between the ink line and the laser line should be less than the ink line width (0.5mm)]. (Fig. 23)

PRACTICAL APPLICATIONS

WARNING: * To avoid personal injury, never remove or place a workpiece on the table while the tool is being operated.

*** Never place your limbs inside of the line next to warning sign while the tool is being operated. This may cause hazardous conditions (see Fig. 24).**

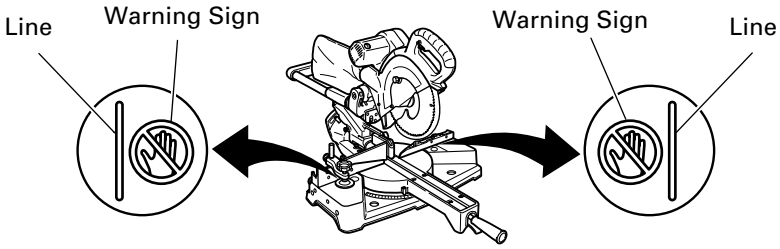


Fig. 24

1. Switch operation
   Switch operation the tool is turned on when the switch trigger is pulled and off when the trigger switch is released.
2. Using the Vise Assembly (Standard accessory)

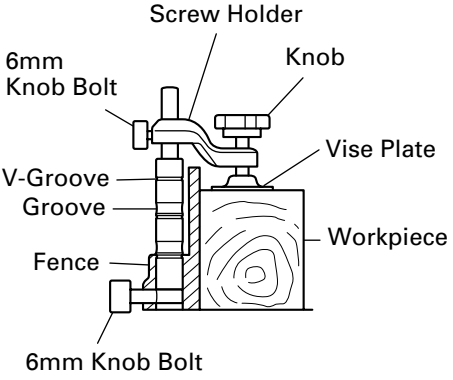


Fig. 25

The vise assembly can be mounted on either the left fence (Fence (B)) or the right fence (Fence (A)), and can be raised or lowered according to the height of the workpiece.

To raise or lower the vise assembly, first loosen the 6mm knob bolt. As shown in Fig. 25, the vise shaft has three locking grooves into which the tip of the 6mm wing bolt is designed to fit in order to lock the screw holder in the desired position.

To ensure that the tip of the 6mm wing bolt is properly aligned with the desired locking groove on the vise shaft, simply align the upper surface of the fence to either of three v-grooves on the vise shaft surface or to the lower surface of the screw holder.

Therefore, the vise assembly can be attached in either of three positions to ensure proper height adjustment.
After adjusting the height, firmly tighten the 6mm wing bolt; then turn the upper knob, as necessary, to securely attach the workpiece in position.

CAUTION: Always confirm that the motor head (see Fig. 1) does not contact the vise assembly when it is lowered for cutting. If there is any danger that it may do so, loosen the 8mm knob bolt slightly and move the vise assembly to a position where it will not contact the saw blade.
In case of compound cutting of left bevel angle and left miter angle, a workpiece of up to 56mm (2-7/32") can be fixed with a vise assembly mounted on the left side. In case the workpiece height exceeds 56mm (2-7/32"), mount the vise assembly on the opposite side of the inclination of the motor head. For other compound cutting (left bevel + right miter, right bevel + left miter and right bevel + right miter), mount the vise assembly on the opposite side of the inclination of the motor head to avoid the contact of the vise assembly with the motor head.

3. Cutting Operation

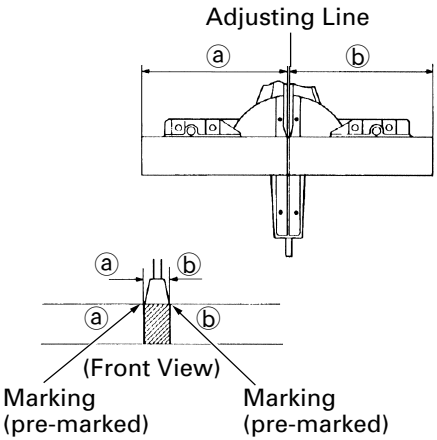


Fig. 26

(1) As shown in Fig. 26 the width of the saw blade is the width of the cut. Therefore, slide the workpiece to the right (viewed from the operator's position) when length ⓑ is desired, or to the left when length ⓐ is desired.
(2) After turning on the switch and checking that the saw blade is rotating at maximum speed, slowly push down the handle while holding down the lever (A) and bring the saw blade in the vicinity of the material to be cut.
(3) Once the saw blade contacts the workpiece, push the handle down gradually to cut into the workpiece.
(4) After cutting the workpiece to the desired depth, turn the power tool OFF and let the saw blade stop completely before raising the handle from the workpiece to return it to the full retract position.

CAUTION:* Increased pressure on the handle will not increase the cutting speed. On the contrary, too much pressure may result in overload of the motor and/or decreased cutting efficiency.

WARNING: * Confirm that the trigger switch is turned OFF and the power plug has been removed from the receptacle whenever the tool is not in use.
*** Always turn the power off and let the saw blade stop completely before raising the handle from the workpiece.**
If the handle is raised while the saw blade is still rotating, the cut-off piece may become jammed against the saw blade causing fragments to scatter about dangerously.

*** Every time one cutting or deep-cutting operation is finished, turn the switch off, and check that the saw blade has stopped. Then raise the handle, and return it to the full retract position.**

*** Be absolutely sure to remove the cut material from the top of the turntable, and then proceed to the next step.**

*** Continued cutting operation can result in overload of the motor. Touch the motor and if it's hot, stop your cutting operation once and rest for 10 minutes or so, and then restart your cutting operation.**

4. Cutting narrow workpieces (Press cutting)

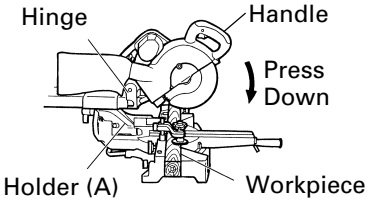


Fig. 27

Slide the hinge down to holder (A), then tighten the slide securing knob (see Fig. 2) as indicated in Fig. 27.
Lower the handle to cut the workpiece.
Using the power tool this way will permit cutting of workpieces of up to 88mm (3-15/32") square.

5. Cutting large workpieces

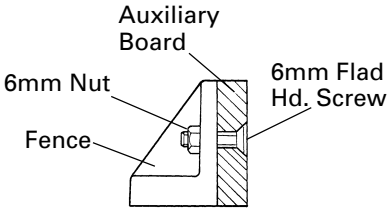


Fig. 28

There may be case when a complete cutting cannot be done depending on the height of workpiece. In this case, mount an auxiliary board with the 6mm flat head screws and the 6mm nuts using the 7mm holes on the fence surface (two holes on each side). (Fig. 28)
Refer to page 6 "SPECIFICATIONS" for the thickness of the auxiliary board.

6. Cutting wide workpieces (Slide cutting)

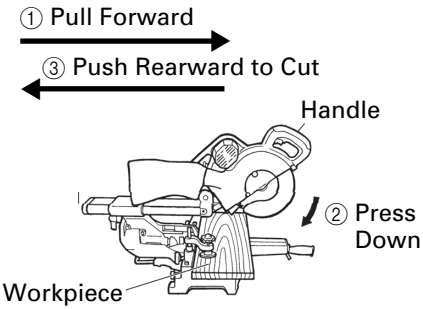


Fig. 29

(1) Workpieces up to 88mm (3-15/32") high and 312mm (12-9/32") wide:
Loosen the slide securing knob (see Fig. 2), grip the handle and slide the saw blade forward. Then press down on the handle and slide the saw blade back to cut the workpiece as indicated in Fig. 29. This facilitates cutting of workpieces of up to 88mm (3-15/32") in height and 312mm (12-9/32") in width.

(2) Workpieces up to 91mm (3-19/32") high and 300mm (11-13/16") wide:
Workpieces of up to 91mm (3-19/32") in height and up to 300mm (11-13/16") in width can be cut in the same manner as described in paragraph 6-(1) above.

CAUTION:
* **When cutting a workpiece of 88mm (3-15/32") height, adjust the lower limit position of the motor head so that the gap between the lower edge of the motor head and the workpiece will be 2 to 3mm (3/32" to 1/8") at the lower limit position.**
* **If the handle is pressed down with excessive or lateral force, the saw blade may vibrate during the cutting operation and cause unwanted cutting marks on the workpiece, thus reducing the quality of the cut. Accordingly, press the handle down gently and carefully.**
* **In slide cutting, gently push the handle back (rearwards) in a single, smooth operation.**
  Stopping the handle movement during the cut will cause unwanted cutting marks on the workpiece.

WARNING:
* **For slide cutting, follow the procedures indicated above in Fig. 29. Forward slide cutting (toward the operator) is very dangerous because the saw blade could kick upward from the workpiece. Therefore, always slide the handle away from the operator.**
* **Always return the carriage to the full rear position after each crosscut operation in order to reduce the risk of injury.**
* **Never put your hand on the side handle during the cutting operation because the saw blade comes close to the side handle when the motor head is lowered.**

7. Bevel cutting procedures

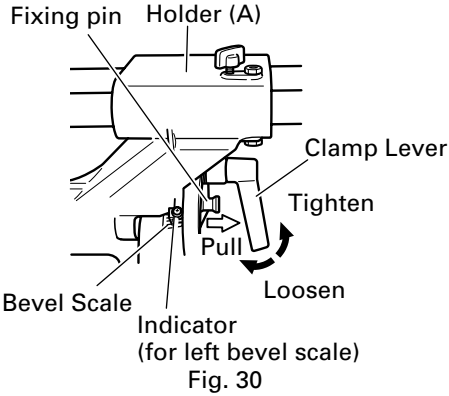


Fig. 30

(1) Loosen the clamp lever and bevel the saw blade to the left or to the right.
When tilting the motor head to the right pull the fixing pin towards the rear.
The clamp lever adopts a latchet system. When contacting the work bench and the main body, pull the clamp lever in the direction of the arrow mark as illustrated in Fig. 30, and change the direction of the clamp lever.

(2) Adjust the bevel angle to the desired setting while watching the bevel angle scale and indicator, then secure the clamp lever.

(3) Follow the procedures indicated in paragraphs 4,5 and 6 above. For maximum dimensions for bevel cutting, refer to "SPECIFICATIONS" table on page 6.

WARNING: **When the workpiece is secured on the left or right side of the blade, the short cut-off portion will come to rest on the right or left side of the saw blade. Always turn the power off and let the saw blade stop completely before raising the handle from the workpiece.**
If the handle is raised while the saw blade is still rotating, the cut-off piece may become jammed against the saw blade causing fragments to scatter about dangerously.

When stopping the bevel cutting operation halfway, start cutting after pulling back the motor head to the initial position.
Starting from halfway, without pulling back, causes the lower guard to be caught in the cutting groove of the workpiece and to contact the saw blade.

CAUTION: When cutting a workpiece of 61mm(2-13/32") height in the left 45° bevel cutting position or a workpiece of 36mm (1-13/32") height in the right 45° bevel cutting position, adjust the lower limit position of the motor head so that the gap between the lower edge of the motor head and the workpiece will be 2 to 3mm (3/32" to 1/8") at the lower limit position (refer to "3. Checking the saw blade lower limit position" on page 12).

8. Miter cutting procedures

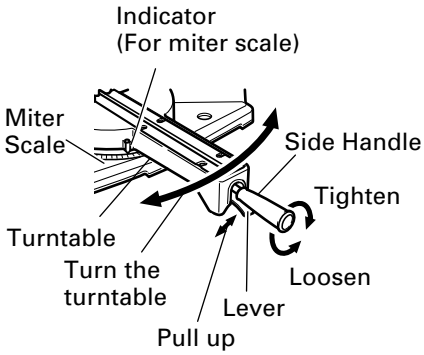


Fig. 31

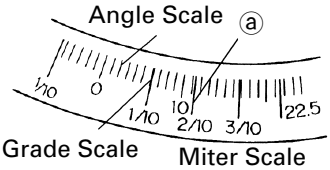


Fig. 32

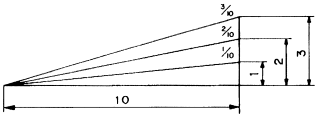


Fig. 33

(1) Loosen the side handle and pull up the lever for angle stoppers. Then, adjust the turntable until the indicator aligns with desired setting on the miter scale (Fig. 31).
(2) Re-tighten the side handle to secure the turntable in the desired position.
(3) The miter scale (Fig. 32) indicates both the cutting angle on the angle scale and the gradient on the grade scale.
(4) The gradient, which is the ratio of the height to the base of the triangular section to be removed, may be used for setting the miter scale instead of the cutting angle, if desired (see Fig. 33).
(5) Therefore, to cut a workpiece at a grade of 2/10, set the indicator to position ⓐ as indicated in Fig. 32.

NOTE: * Positive stops are provided at the right and left of the 0° center setting, at 15°, 22.5°, 30° and 45° settings.
Check that the miter scale and the tip of the indicator are properly aligned.
*** Operation of the saw with the miter scale and indicator out of alignment, or with the side handle not properly tightened, will result in poor cutting precision.**

9. Compound cutting procedures
Compound cutting can be performed by following the instructions in 7 and 8 above. For maximum dimensions for compound cutting, refer to "SPECIFICATIONS" table on page 6.

CAUTION: Always secure the workpiece with the right or left hand and cut it by sliding the round portion of the saw backwards with the left hand.
It is very dangerous to rotate the turntable to the left during compound cutting because the saw blade may come into contact with the hand that is securing the workpiece.
In case of compound cutting (angle + bevel) by left bevel, turn the sub-fence counterclockwise, and engage in the cutting operation.

10. Crown molding cutting procedures

Fig. 34 shows two common crown molding types having angles of (θ) 38° and 45°. For the typical crown molding fittings, see Fig. 35.

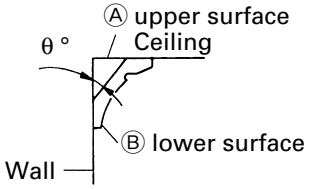


Fig. 34

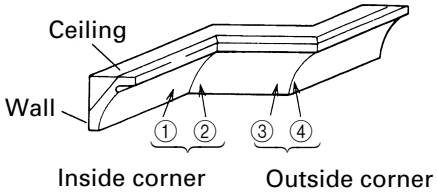


Fig. 35

The table below shows the miter angle and the bevel angle settings that are ideal for the two crown molding types.

For miter cut setting

If the turntable has been set to either of the angles described, move the turntable adjusting side handle a little to the right and left to stabilize the position and to properly align the miter angle scale and the tip of the indicator before the operation starts.

For bevel cut setting

Move handle on bevel section to the left and check that the position is stable and that the bevel angle scale and the tip of the indicator are properly aligned. Then tighten the clamp lever.

Type of Crown Molding	To process crown molding at positions ① and ④ in Fig. 35.		To process crown molding at positions ② and ③ in Fig. 35.	
	Miter Angle Setting	Bevel Angle Setting	Miter Angle Setting	Bevel Angle Setting
45° Type	right 35.3° (▼ mark)	left 30° (▼ mark)	left 35.3° (▼ mark)	left 30° (▼ mark)
38° Type	right 31.6° (▼ mark)	left 33.9° (▼ mark)	left 31.6° (▼ mark)	left 33.9° (▼ mark)

30° and 33.9° left slant setting method

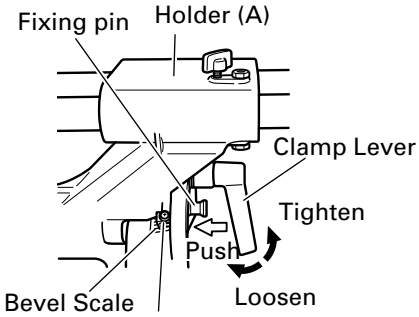


Fig. 36

(1) Loosen the clamp lever and slant to the left a little at a time while pushing the fixing pin into the main unit. At this time, the fixing pin will enter one step and fit into the 30° left slant and 33.9° left slant setting slots.
(2) With the fixing pin in the slot as described above, setting to the 30° left slant position is possible by pushing to the right side.
(3) Also, with the fixing pin in the slot as described above, setting to the 33.9° left slant position is possible by pushing to the left side.
(4) Look at the bevel scale and indicator to recheck whether or not the settings match and then tighten the clamp lever.

(1) Setting to cut crown moldings at positions ① and ④ in Fig. 35 (see Fig. 37; tilt the motor head to the left):
   ① Turn the turntable to the right and set the Miter Angle as follows:
      * For 45° type crown moldings: 35.3° (↓ mark)
      * For 38° type crown moldings: 31.6° (↓ mark)
   ② Tilt the motor head to the left and set the Bevel Angle as follows:
      * For 45° type crown moldings: 30° (↓ mark)
      * For 38° type crown moldings: 33.9° (↓ mark)
   ③ Position the crown molding so that the upper surface (Ⓐ in Fig. 34) contacts the fence as indicated in Fig. 39.
(2) Setting to cut crown moldings at positions ② and ③ in Fig. 35 (see Fig. 38; tilt the head to the left):
   ① Turn the turntable to the left and set the Miter Angle as follows:
      * For 45° type crown moldings: 35.3° (↓ mark)
      * For 38° type crown moldings: 31.6° (↓ mark)
   ② Tilt the head to the left and set the Bevel Angle as follows:
      * For 45° type crown moldings: 30° (↓ mark)
      * For 38° type crown moldings: 33.9° (↓ mark)
   ③ Position the crown molding so that the lower surface (Ⓑ in Fig. 34) contacts the fence as in Fig. 40.

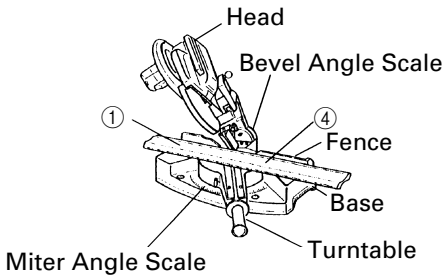


Fig. 37

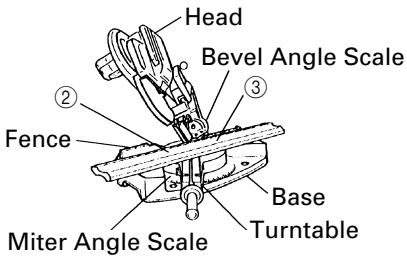


Fig. 38

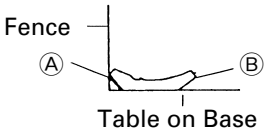


Fig. 39

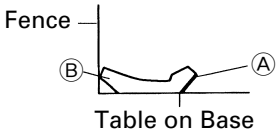


Fig. 40

(3) Setting to cut crown moldings at positions ① and ④ in Fig. 35 (see Fig. 41; tilt the head to the right):

① Turn the turntable to the right and set the Miter Angle as follows:
* For 45° type crown moldings: 35.3° (↓ mark)
* For 38° type crown moldings: 31.6° (↓ mark)

② Tilt the head to the right and set the Bevel Angle as follows:
* For 45° type crown moldings: 30° (↓ mark)
* For 38° type crown moldings: 33.9° (↓ mark)

③ Position the crown molding so that the upper surface (Ⓑ in Fig. 34) contacts the fence as indicated Fig. 43.

(4) Setting to cut crown moldings at positions ② and ③ in Fig. 35 (see Fig. 42; tilt the head to the right):

① Turn the turntable to the left and set the Miter Angle as follows:
* For 45° type crown moldings: 35.3° (↓ mark)
* For 38° type crown moldings: 31.6° (↓ mark)

② Tilt the head to the right and set the Bevel Angle as follows:
* For 45° type crown moldings: 30° (↓ mark)
* For 38° type crown moldings: 33.9° (↓ mark)

③ Position the crown molding so that the lower surface (Ⓐ in Fig. 34) contacts the fence as in Fig. 44.

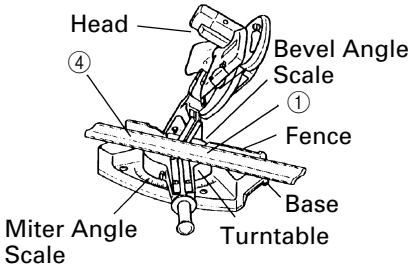


Fig.41

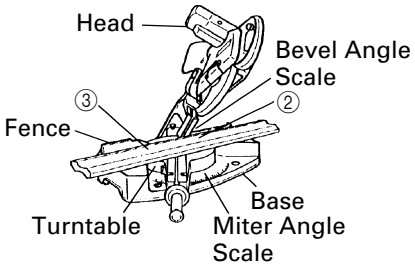


Fig. 42

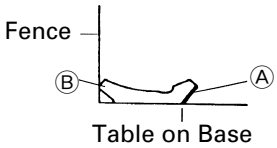


Fig. 43

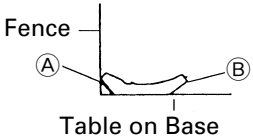


Fig. 44

Cutting method of crown molding without tilting the saw blade.

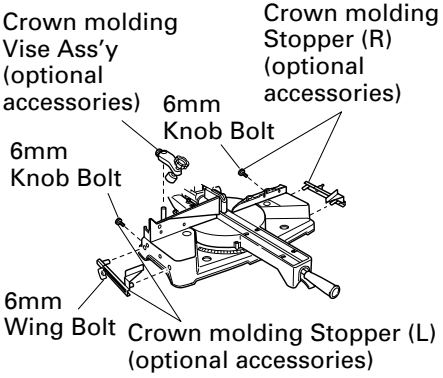


Fig. 45-a

(1) Crown molding Stopper (L) and (R) (optional accessories) allow easier cuts of crown molding without tilting the saw blade. Install them in the base both-sides side to be shown in Fig. 45-a. After inserting Tighten the 6mm knob bolts to secure the crown molding Stoppers.

[Optional accessories used]

- Crown molding Vise Ass'y (Include Crown molding Stopper (L))
- Crown molding Stopper (L)
- Crown molding Stopper (R)

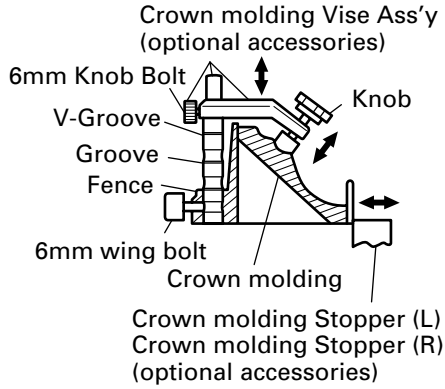


Fig. 45-b

(2) The crown molding vise (B) (Optional accessory) can be mounted on either the left fence (Fence (B)) or the right fence (Fence (A)). It can unite with the slope of the crown molding and vice can be pressed down.

Then turn the upper knob, as necessary, to securely attach the crown molding in position. To raise or lower the vise assembly, first loosen the 6mm knob bolt. As shown in Fig. 45-b, the vise shaft has three locking grooves into which the tip of the 6mm wing bolt is designed to fit in order to lock the screw holder in the desired position.

To ensure that the tip of the 6mm wing bolt is properly aligned with the desired locking groove on the vise shaft, simply align the upper surface of the fence to either of three v-grooves on the vise shaft surface or to the lower surface of the screw holder.

Therefore, the vise assembly can be attached in either of three positions to ensure proper height adjustment.

After adjusting the height, firmly tighten the 6mm wing bolt; then turn the upper knob, as necessary, to securely attach the crown molding in position. (see Fig. 45-b)

WARNING: Always firmly clamp or vise to secure the crown molding to the fence; otherwise the crown molding might be thrust from the table and cause bodily harm.

Do not bevel cutting. The main body or saw blade may contact the sub fence, resulting in an injury.

CAUTION: Always confirm that the motor head (see Fig. 1) does not contact the crown molding vise ass'y when it is lowered for cutting. If there is any danger that it may do so, loosen the 6mm knob bolt and move the crown molding vise ass'y to a position where it will not contact the saw blade.

Position crown molding with its WALL CONTACT EDGE against the guide fence and its CEILING CONTACT EDGE against the crown molding Stoppers as shown in Fig. 45-b. Adjust the crown molding Stoppers according to the size of the crown molding. Tighten the 6mm wing bolt to secure the crown molding Stoppers. Refer to the lower table for the miter angle.

	Position in Fig. 35	Miter angle	Finished piece
For inside corner	①	Right 45°	Save the right side of blade
	②	Left 45°	Save the left side of blade
For outside corner	③		Save the right side of blade
	④	Right 45°	Save the left side of blade

Use the sub fence (A) (optional accessories) to secure the crown molding more firmly. (see Fig. 15)

11. Groove cutting procedures

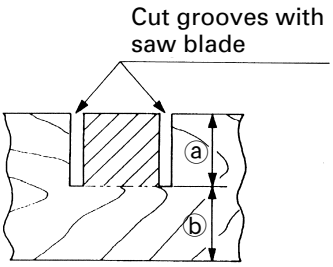


Fig. 46

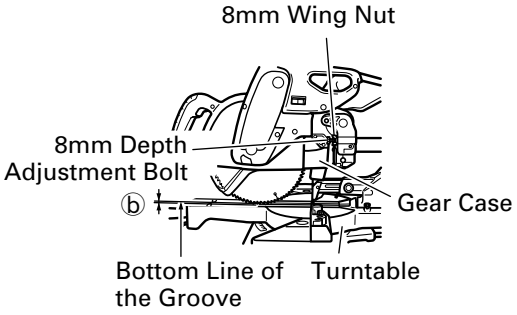


Fig. 47

Grooves in the workpiece can be cut as indicated in Fig. 46 by adjusting the 8mm depth adjustment bolt.

Cutting depth adjustment procedure:

(1) Loosen the 8mm wing nut and turn the 8mm depth adjustment bolt by hand.
(2) Adjust to the desired cutting depth by setting the distance between the saw blade and the surface of the base (see ⓑ in Fig. 46).
(3) The 8mm wing nut must be properly tightened after the adjustment has been completed.

NOTE: When cutting a single groove at either end of the workpiece, remove the unneeded portion with a chisel.

12. Cutting easily-deformed materials, such as aluminum sash

Materials such as aluminum sash can easily deform when tightened too much in a vise assembly. This will cause inefficient cutting and possible overload of the motor.

When cutting such materials, use a wood plate to protect the workpiece as shown in Fig. 48-a. Set the wood plate near the cutting section.

When cutting aluminum materials, coat the saw blade with cutting oil (non-combustible) to achieve smooth cutting and a fine finish.

In addition, in case of a U-shaped workpiece, use the wood plate as shown in Fig. 48-b to ensure stability in the lateral direction, and clamp it near the cutting section of the workpiece and tighten it using both the vise assembly and the clamp available in the market.

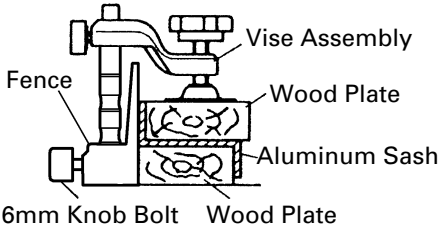


Fig. 48-a

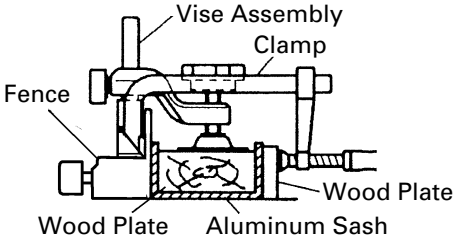


Fig. 48-b

13. How to use the dust bag (Standard accessory)

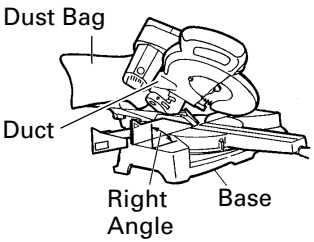


Fig. 49

(1) When the dust bag has become full of sawdust, dust will be blown out of the dust bag when the saw blade rotates.
Check the dust bag periodically and empty it before it becomes full.

(2) During bevel and compound cutting, attach the dust bag at a right angle to the base surface as shown in Fig. 49.

CAUTION: Empty the dust bag frequently to prevent the duct and the lower guard from becoming clogged.
Sawdust will accumulate more quickly than normal during bevel cutting.

SAW BLADE MOUNTING AND DISMOUNTING

WARNING: * **To prevent an accident or personal injury, always turn off the trigger switch and disconnect the power plug from the receptacle before removing or installing a saw blade.**
If cutting work is done in a state where the bolt is not sufficiently tightened, the bolt can get loose, the blade can come off, and the lower guard can get damaged, resulting in injuries.
Also, check that the bolts are properly tightened before plugging the power plug into the receptacle.
*** If the bolts are attached or detached using tools other than the 10mm box wrench (standard accessory), excessive or improperly tightening occurs, resulting in injury.**

1. Mounting the saw blade (Fig. 50-a, Fig. 50-b and Fig. 50-c)
   (1) Use the accessory 10mm box wrench to loosen the 6mm bolt fastening the spindle cover and then remove the spindle cover. (Only model 240V)
   (2) Press in spindle lock and loosen bolt with 10mm box wrench (standard accessory). Since the bolt is left-hand threaded, loosen by turning it to the right as shown in Fig. 50-c.

   NOTE: If the spindle lock cannot be easily pressed in to lock the spindle, turn the bolt with 10mm box wrench (standard accessory) while applying pressure on the spindle lock.
   The saw blade spindle is locked when the spindle lock is pressed inward.

   (3) Remove the bolt and washer (D) and collar.
   The color has outside diameters of 25.4mm (1") or 30mm (1-3/16") as shown in Fig. 51. Use the collar to meet the inside diameter of the saw blade applied.

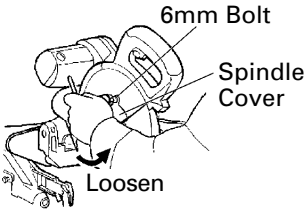


Fig. 50-a

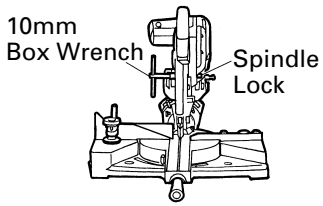


Fig. 50-b

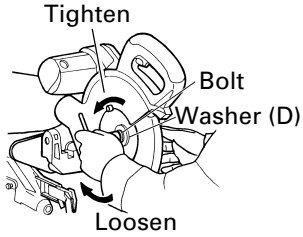


Fig. 50-c

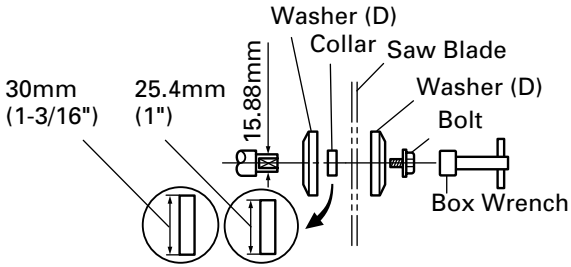


Fig. 51

(4) Lift the lower guard and mount the saw blade.

WARNING: When mounting the saw blade, confirm that the rotation indicator mark on the saw blade and the rotation direction of the gear case (see Fig. 1) are properly matched.

(5) Thoroughly clean washer (D), collar and the bolt, and install them onto the saw blade spindle.
(6) Press in the spindle lock and tighten the bolt by turning it to the left by standard accessorie's wrench (10mm box wrench) as indicated in Fig. 50-c.

CAUTION:* A dust guide is installed inside behind the gear case.
When removing or installing the saw blade, do not make contact with the dust guide. Contact may break or chip saw blade tips.
*** Confirm that the spindle lock has returned to the retract position after installing or removing the saw blade.**
*** Tighten the bolt so it does not come loose during operation.**
Confirm the bolt has been properly tightened before the power tool is started.

2. Dismounting the saw blade
Dismount the saw blade by reversing the mounting procedures described in paragraph 1 above.
The saw blade can easily be removed after lifting the lower guard.

CAUTION: Never attempt to install saw blades larger than 262mm (10") in diameter. Always install saw blades that are 262mm (10") in diameter or less.

MAINTENANCE AND INSPECTION

WARNING: To avoid an accident or personal injury, always confirm that the trigger switch is turned OFF and the power plug has been disconnected from the receptacle before performing any maintenance or inspection of this tool.

1. Inspecting the saw blade
Always replace the saw blade immediately upon the first sign of deterioration or damage. A damaged saw blade can cause personal injury and a worn saw blade can cause ineffective operation and possible overload to the motor.

CAUTION: Never use a dull saw blade. When a saw blade is dull, its resistance to the hand pressure applied by the tool handle tends to increase, making it unsafe to operate the power tool.

2. Adjusting a loose slide pipe

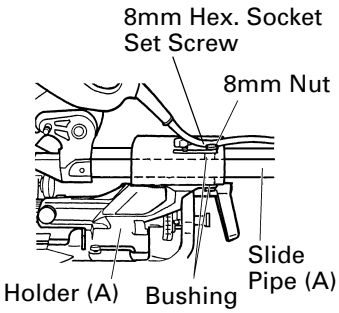


Fig. 52

After extended use of the power tool, the slide pipe (A) and the bushing can become loose due to vibration. Never operate the tool if any components are loose to avoid personal injury.

(1) Loosen the 8mm nut and tighten the two 8mm hexagon socket set screws until the power tool operates smoothly without looseness.

(2) Properly tighten the 8mm nut after completing these adjustment.

3. Inspecting the carbon brushes

For your continued safety and electrical shock protection, carbon brush inspection and replacement on this tool should ONLY be performed by a Hitachi Authorized Service Center.

4. About Handling the Motor (see Fig. 1)

Winding of the motor is said to be the heart of this tool. Exercise utmost caution not to damage the winding by exposing it to wash oil or water.

NOTE: Accumulation of dust and the like inside the motor can result in a malfunction. After using the motor for 50 hours or so, carry out no-load running, and blow in the dry air from a wind hole at the motor's rear. Such action is effective to discharge dust and the like.

5. Inspecting the screws

Regularly inspect each component of the power tool for looseness.
Re-tighten screws on any loose part.

WARNING: To prevent personal injury, never operate the power tool if any components are loose.

6. Inspecting the lower guard for proper operation

Before each use of the tool, test the lower guard (see Fig. 7) to assure that it is in good condition and that it moves smoothly.
Never use the tool unless the lower guard operates properly and it is in good mechanical condition.

7. Storage

After operation of the tool has been completed, check that the following has been performed:
(1) Trigger switch is in OFF position,
(2) Power plug has been removed from the receptacle,

8. Replacement of guard (C)

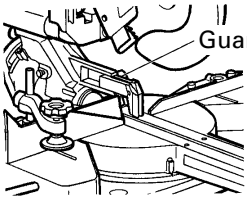


Fig. 53

After long-term use, the blade slot in the guard may widen and require replacement. If the blade slot should widen, replace the guard with a new one. After replacing, make a groove on it. Refer to "1. Cutting a groove on the guard" on page 11.

9. Replacement of Poly-V-Belt

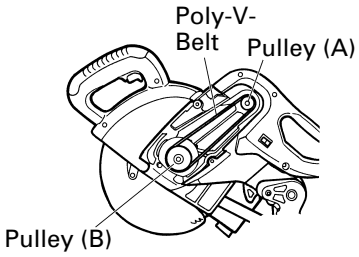


Fig. 54

The power of the motor is transmitted to the saw blade by a Poly-V-Belt. When the Poly-V-Belt is broken or damaged, remove the belt cover by loosening the two 5mm screws (see Fig. 2) and replace the damaged one with the new one.
When connecting the belt on pulleys, first connect 2 or 3 teeth of Poly-V-Belt to the grooves of the pulley (A) and pulley (B). Then turning the pulley (A) and pulley (B), connect all 10 teeth of the belt to the pulleys.

10. Lubrication

Lubricate the following sliding surfaces once a month to keep the power tool in good operating condition for a long time (see Fig. 1 and Fig. 2). Use of machine oil is recommended.

Oil supply points:

* Rotary portion of hinge
* Rotary portion of vise assembly
* Rotary portion of holder (A)

11. Cleaning

Periodically remove chips, dust and other waste material from the surface of the power tool, especially from the inside of the lower guard with a damp, soapy cloth. To avoid a malfunction of the motor, protect it from contact with oil or water.

(Only Model C10FSH)

If the laser line becomes invisible due to chips and the like adhered onto the window of the laser marker's light-emitting section, wipe and clean the window with a dry cloth or a soft cloth moistened with soapy water, etc.

12. Replacing supply cord

If the supply cord of Tool is damaged, the Tool must be returned to Hitachi Authorized Service Center for the cord to be replaced.

13. Service parts list
    A: Item No.
    B: Code No.
    C: No. Used
    D: Remarks

CAUTION: **Repair, modification and inspection of Hitachi Power Tools must be carried out by a Hitachi Authorized Service Center.**
This Parts List will be helpful if presented with the tool to the Hitachi Authorized Service Center when requesting repair or other maintenance.
In the operation and maintenance of power tools, the safety regulations and standards prescribed in each country must be observed.

MODIFICATIONS:

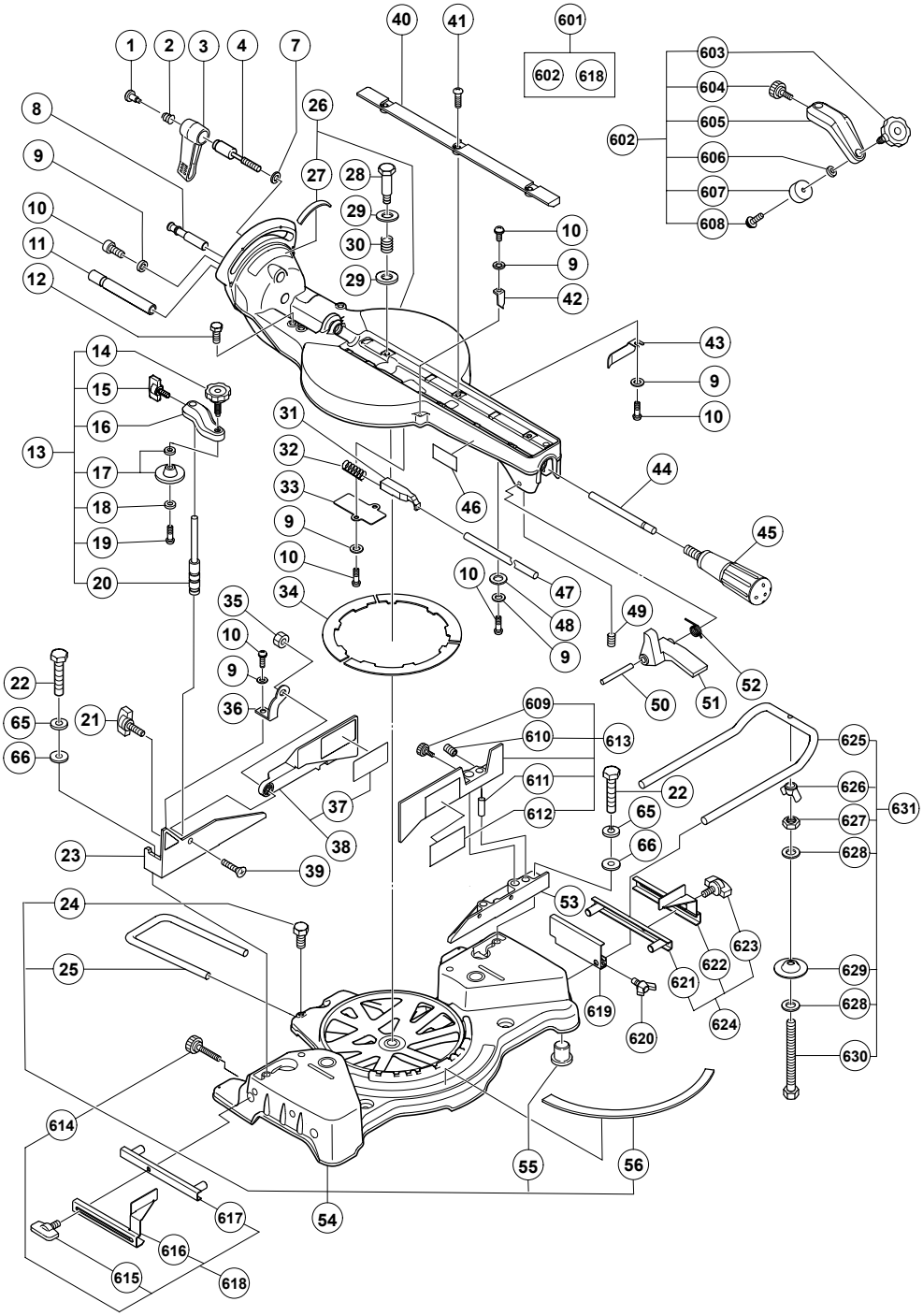
Hitachi Power Tools are constantly being improved and modified to incorporate the latest technological advancements.
Accordingly, some parts (i.e. code numbers and/or design) may be changed without prior notice.

SERVICE AND REPAIRS

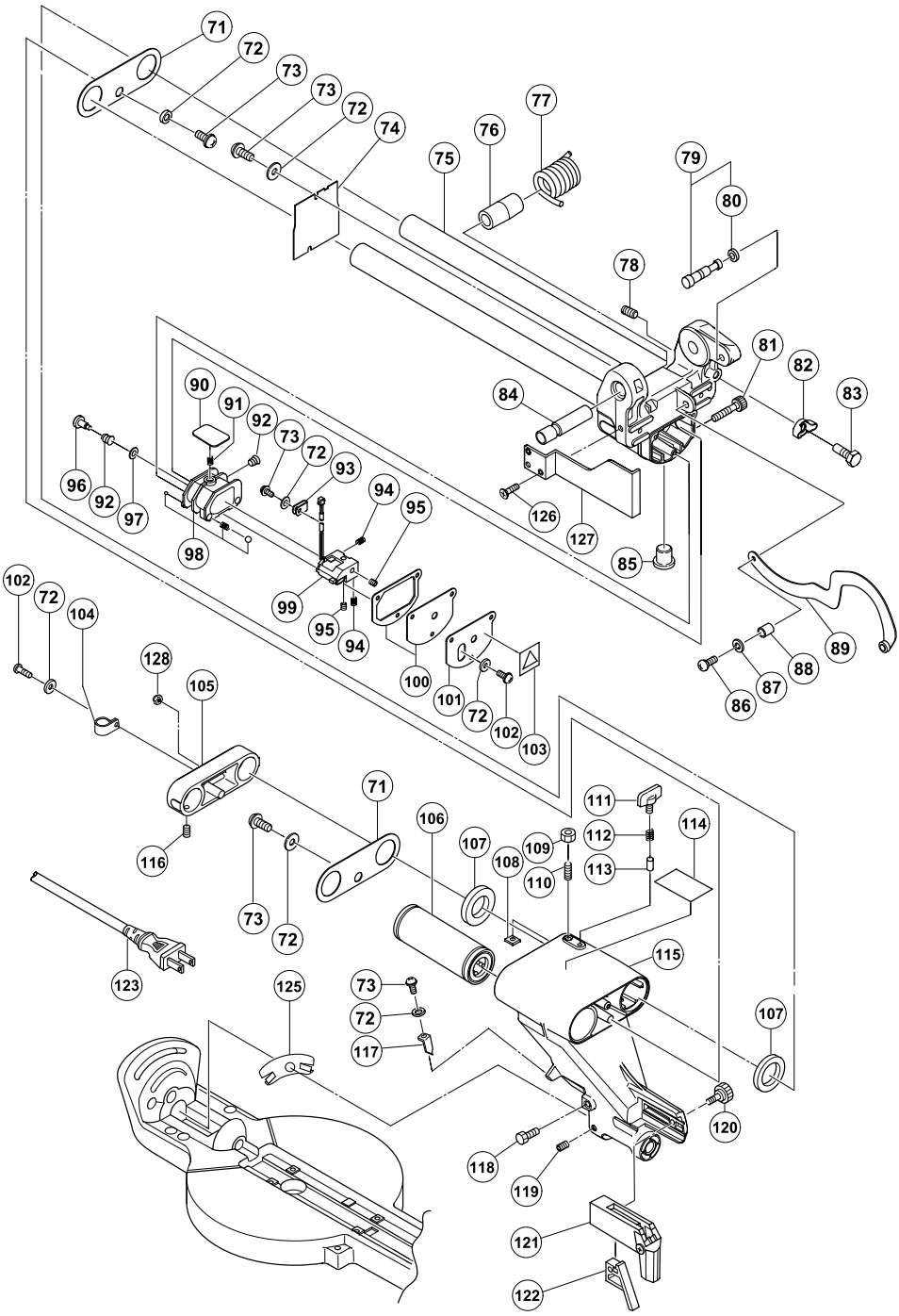
All quality power tools will eventually require servicing or replacement of parts because of wear from normal use. To assure that only authorized replacement parts will be used and that the double insulation system will be protected, all service (other than routine maintenance) must be performed by an AUTHORIZED HITACHI POWER TOOL REPAIR CENTER ONLY.

NOTE: **Specifications are subject to change without any obligation on the part of HITACHI.**

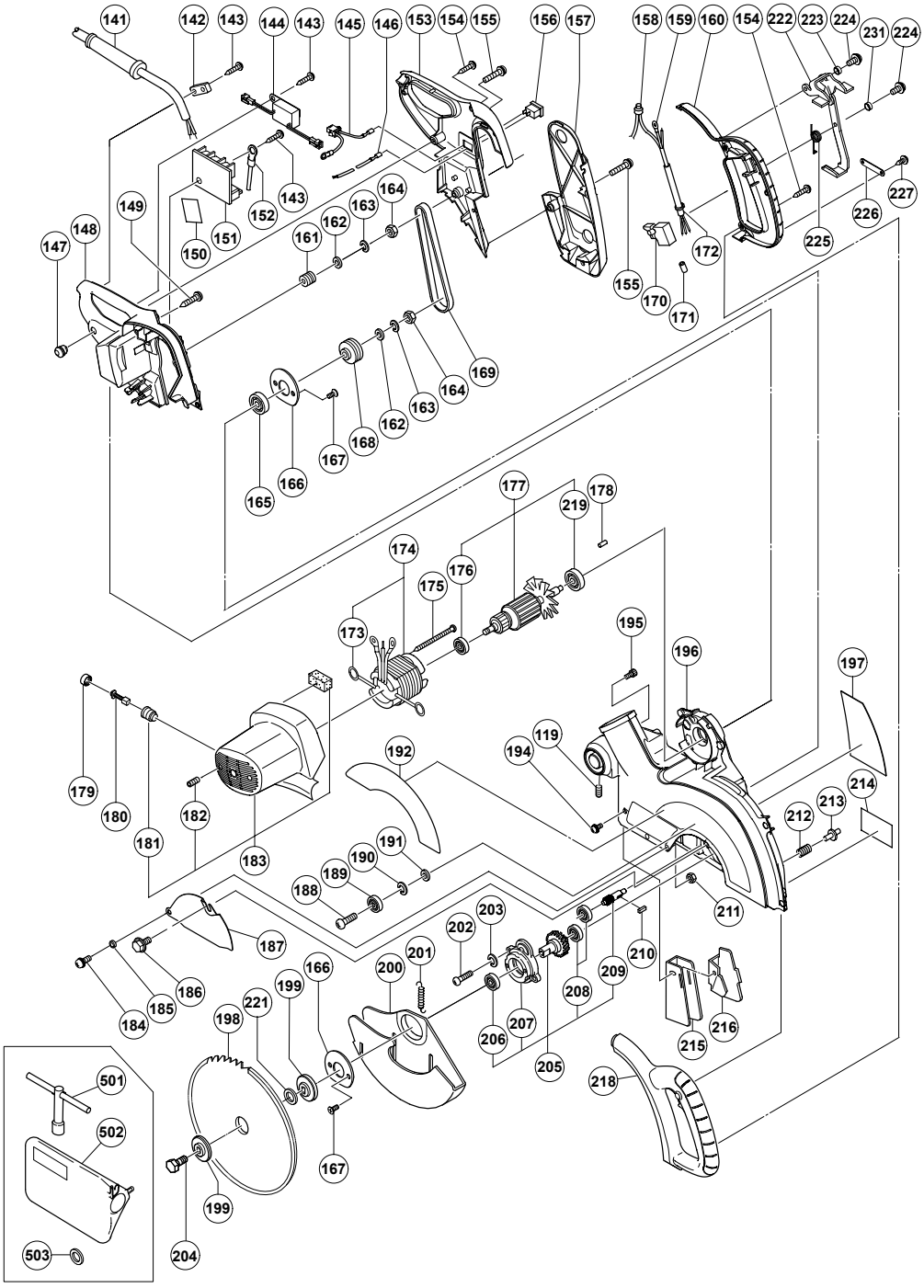
C10FSH


1
2
3
4
7
40
41
601
602
618
603
604
605
606
607
608
8
26
9
27
28
29
30
10
11
12
42
43
14
15
16
13
17
18
19
20
31
32
33
44
45
46
34
47
48
49
50
51
52
35
36
22
65
66
21
609
610
611
612
613
625
626
627
628
631
37
38
23
39
24
25
53
623
622
621
624
619
620
629
630
614
55
56
54
617
616
615
618

C10FSH


71
72
73
73
72
74
75
76
77
79
80
78
81
82
83
84
90
91
92
73
72
93
94
95
96
92
97
98
99
95
94
100
101
72
102
103
85
126
127
89
88
87
86
102
72
104
128
105
116
71
106
107
108
109
110
111
112
113
114
115
73
72
123
125
73
72
117
107
120
118
119
121
122

C10FSH


141
142
143
144
143
145
146
153
154
155
156
157
158
159
160
154
222
223
224
231
224
149
148
147
150
151
152
143
161
162
163
164
155
170
171
172
225
226
227
169
164
163
162
168
167
165
166
177
219
178
174
175
176
173
195
196
197
179
180
181
182
183
192
194
119
214
213
212
211
188
189
190
191
187
186
185
184
202
203
201
200
199
166
221
198
208
209
210
216
215
206
207
205
218
501
502
503
204
199
167

C10FSH

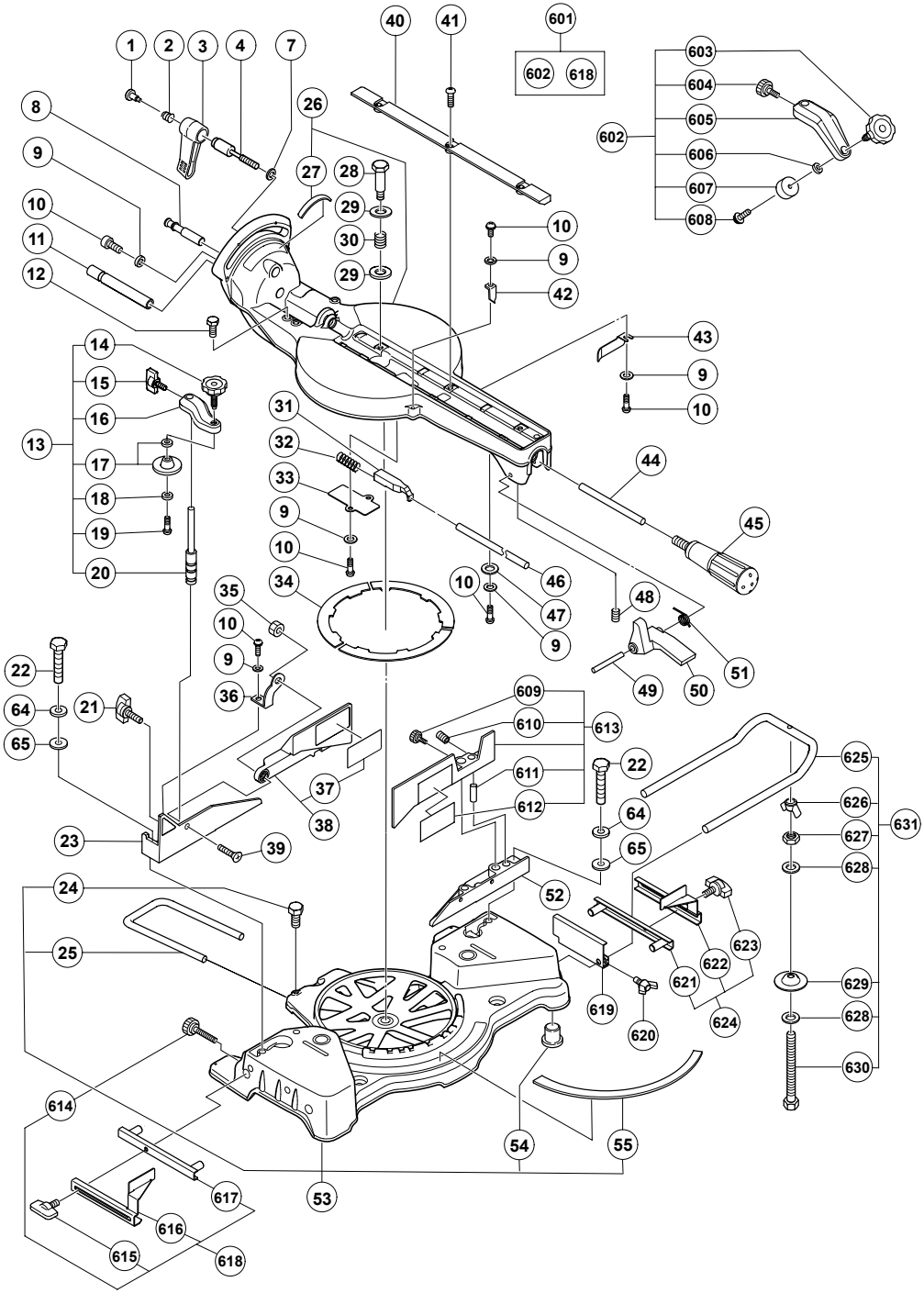
A	B	C	D
1	305-180	1	
2	305-179	1	
3	312-488	1	
4	329-409	1	M10
7	965-077	1	
8	321-330	1	
9	949-429	8	M4
10	949-215	8	M4 × 8
11	320-141	1	
12	303-409	2	M8 × 25
13	321-370	1	″14-20″
14	308-396	1	M10
15	307-947	1	M6 × 12
16	———	1	
17	319-974	1	
18	996-722	1	
19	996-247	1	M5 × 12
20	321-371	1	
21	302-459	1	M6 × 17
22	949-678	4	M8 × 35
23	321-346	1	
24	949-610	1	M6 × 10
25	998-844	1	
26	330-768	1	9, 10, 27-34, 40, 41, 43, 44, 47-52, 54
27	321-343	1	
28	312-480	1	
29	949-437	2	M12
30	312-481	1	
31	322-280	1	
32	321-417	1	
33	321-336	1	
34	324-400	3	
35	311-144	1	M6
36	321-331	1	
37	———	1	
38	321-385	1	″37″
39	949-342	1	M6 × 25
40	319-549	2	
41	949-256	6	M6 × 16
42	321-329	1	
43	321-342	1	
44	329-416	1	
45	322-283	1	
46	———	1	
47	329-415	1	
48	875-249	2	
49	987-860	1	M6 × 6
50	321-339	1	
51	321-338	1	
52	321-340	1	
53	321-345	1	
54	330-768	1	9, 10, 26-34, 40, 41, 43, 44, 47-52
55	321-672	4	
56	315-210	1	
65	949-457	4	M8
66	949-433	4	M8
71	996-227	2	
72	949-429	11	M4
73	949-215	6	M4 × 8
74	321-349	1	″89″
75	332-815	1	″105″
76	996-276	1	
77	321-332	1	
78	961-554	1	M8 × 10
79	302-518	1	″80″
80	984-528	1	P-6
81	319-270	1	
82	949-312	1	M8
83	949-633	1	M8 × 50
84	320-141	1	
85	312-672	1	
86	949-237	1	M5 × 12
87	949-454	1	M4 × 12
88	998-980	1	
89	322-199	1	
90	319-268	1	
91	319-267	1	
92	305-179	2	
93	980-523	1	
94	319-267	2	
95	319-541	2	M5 × 6
96	305-180	1	
97	962-614	1	T0.5
98	319-269	1	
99	329-863	1	
100	319-271	1	
101	319-272	1	
102	949-217	5	M4 × 12
103	———	1	
104	948-614	1	
105	331-419	1	
106	321-347	1	
107	996-226	2	
108	996-223	2	
109	949-568	2	M8
110	974-500	2	M8 × 16
111	302-459	1	M6 × 17
112	947-859	1	
113	963-174	1	
114	———	1	
115	321-375	1	
116	961-554	2	M8 × 10
117	321-329	2	
118	303-409	1	M8 × 25
119	307-956	2	M5 × 10
120	302-503	1	M6 × 22
121	321-333	1	
122	331-845	1	
123	———	1	
125	322-210	1	
126	949-332	2	M5 × 12
127	322-206	1	
141	938-051	1	
142	937-631	1	
143	984-750	4	D4 × 16
144 1	321-378	1	110V-120V
144 2	322-383	1	220V-240V
145 1	322-384	1	
145 2	322-450	1	″GBR (110V)″
146	321-377	1	
147	319-349	1	
148	321-550	1	
149	305-558	3	D5 × 25
150	321-355	1	

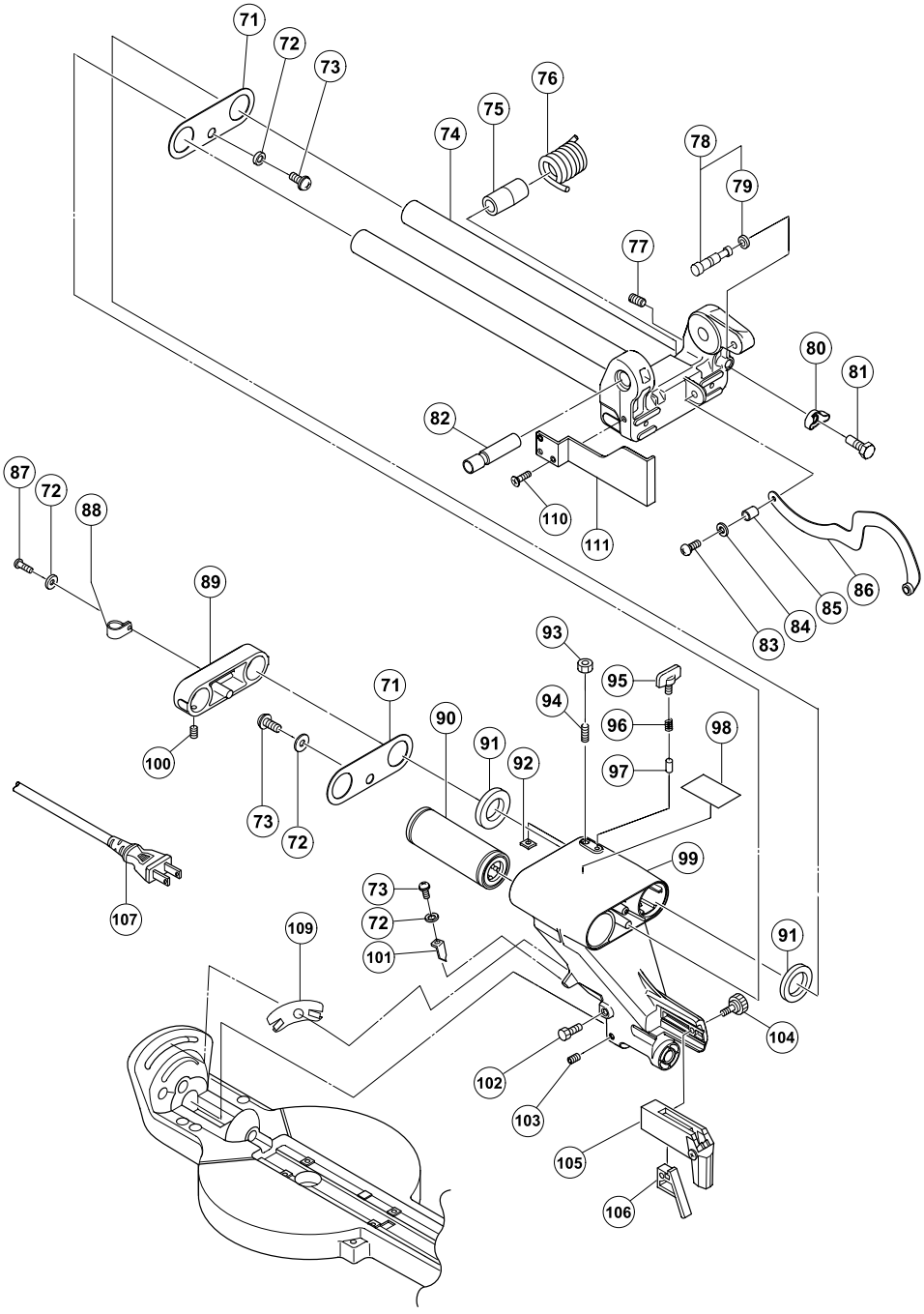
C10FSH

A	B	C	D
151 1	321-354	1	110V-120V
151 2	322-200	1	220V-240V
152	930-804	1	M4.0
153	321-380	1	
154	301-653	6	D4 × 20
155	880-734	4	M5 × 25
156	319-503	1	
157	321-383	1	
158	959-141	1	
159	980-063	1	
160	322-884	1	″218″
161	321-356	1	
162	949-426	2	M8
163	978-559	2	
164	949-558	2	
165	620-1VV	1	6201VVCMPS2L
166	307-731	2	
167	949-322	4	M4 × 10
168	321-357	1	
169	332-810	1	
170	998-868	1	
171	981-373	4	
172	322-207	1	″159, 171″
173	930-703	2	
174 2	340-779F	1	230V-240V ″173″
175	953-174	2	D5 × 55
176	321-399	1	608VVC2NS7L
177 1	360-898E	1	230V ″176, 219″
177 2	360-898F	1	240V ″176, 219″
178	946-362	1	
179	945-161	2	
180	999-043	2	
181	960-685	2	
182	938-477	2	M5 × 8
183	322-208	1	″181, 182″
184	996-247	1	M5 × 12
185	998-980	1	
186	998-836	1	M6 × 12
187	318-958	1	
188	949-258	1	M6 × 20
189	606-ZZM	1	606ZZC2PS2L
190	949-455	1	M6
191	949-456	1	M6
192	————	1	
194	304-043	1	M4 × 10
195	977-839	1	M5 × 10
196	321-384	1	
197	————	1	
198	————	1	
199	308-789	2	
200	322-452	1	
201	322-453	1	
202	949-241	2	M5 × 20
203	949-454	2	M5
204	998-335	1	M7 × 17.5
205	308-787	1	″206-209″
206	600-3DD	1	6003DDCMPS2S
207	308-788	1	
208	608-VVM	2	608VVC2PS2L
209	————	1	
210	931-008	1	4 × 4 × 12

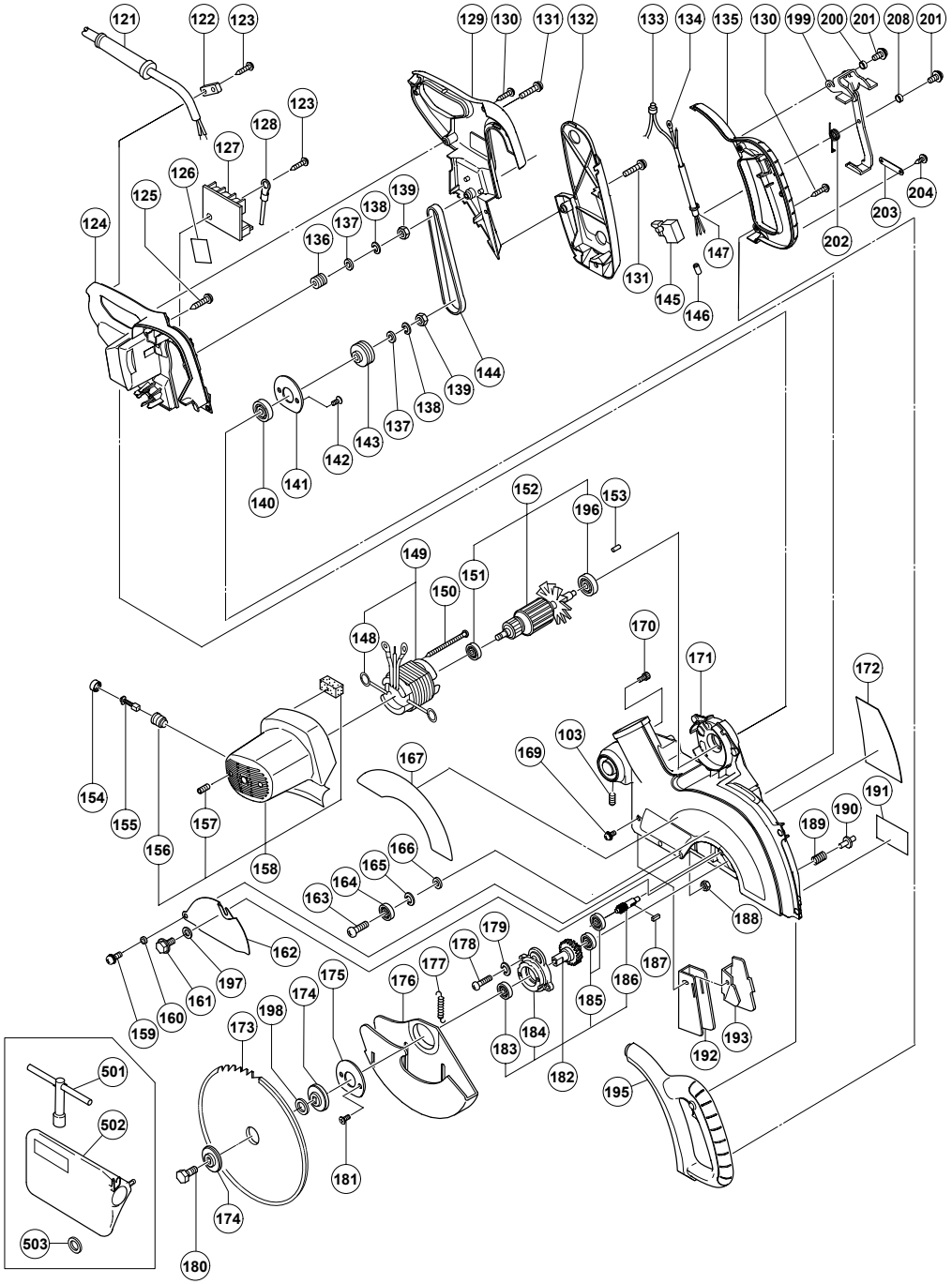
A	B	C	D
211	949-555	1	M5
212	988-821	1	
213	307-732	1	
214	————	1	
215	322-454	1	
216	312-492	1	
218	322-884	1	″160″
219	321-398	1	6201VVCMNS7S
221	976-819	1	
222	322-456	1	
223	302-757	2	
224	935-196	3	M4 × 12
225	322-457	1	
226	322-458	1	
227	306-371	2	D3 × 10
231	305-171	1	
501	940-543	1	10MM
502	998-845	1	
503	974-663Z	1	
601	321-434	1	″602, 618″
602	321-388	1	″603-608″
603	321-551	1	M10 × 54
604	998-836	1	M6 × 11
605	————	1	
606	306-985	1	
607	964-851	1	
608	304-043	1	M4 × 10
609	960-017	1	M6 × 32
610	987-860	2	M6 × 6
611	321-552	2	
612	————	1	
613	321-387	1	″609-612″
614	960-017	1	M6 × 32
615	301-806	1	M6 × 15
616	————	1	
617	321-390	1	
618	321-374	1	″614-617″
619	974-561	1	
620	949-404	1	M6 × 20
621	321-390	1	
622	————	1	
623	301-806	1	M6 × 15
624	321-373	1	″614, 621-623″
625	321-549	2	
626	949-313	2	M6
627	949-556	2	M6
628	967-329	4	
629	996-261	2	
630	996-283	2	M6 × 65
631	321-553	1	″614, 619, 620, 625-630″
634	307-713	1	225MM-D25.4 HOLE-NT72

C10FSB


1
2
3
4
7
40
41
601
602
618
603
604
605
606
607
608
8
9
10
11
12
26
27
28
29
30
29
10
9
42
43
9
10
14
15
16
13
17
18
19
20
31
32
33
9
10
34
44
45
10
46
47
9
48
49
50
51
35
10
9
36
22
64
65
21
37
38
23
39
609
610
613
611
612
22
64
65
625
626
627
628
631
24
25
52
623
622
621
624
619
620
629
628
630
614
54
55
53
617
616
615
618


71
72
73
76
75
74
78
79
77
80
81
82
110
111
87
72
88
89
86
85
84
83
93
95
94
96
98
97
71
90
91
92
100
73
72
99
107
73
72
101
109
91
104
102
103
105
106

C10FSB


121
122
123
129
130
131
132
133
134
135
130
199
200
201
208
201
123
128
127
126
125
124
139
138
137
136
144
139
138
137
143
142
141
140
131
147
145
146
202
203
204
152
196
153
149
151
150
148
170
171
172
103
169
167
154
155
156
157
158
166
165
164
163
162
197
161
160
159
175
174
198
173
176
177
178
179
185
186
187
188
189
190
191
183
184
182
192
193
195
181
180
501
502
503
174

C10FSB

A	B	C	D
1	305-180	1	
2	305-179	1	
3	312-488	1	
4	329-409	1	M10
7	965-077	1	
8	321-330	1	
9	949-429	8	M4
10	949-215	8	M4 × 8
11	320-141	1	
12	303-409	2	M8 × 25
13	321-370	1	″14-20″
14	308-396	1	M10
15	307-947	1	M6 × 12
16	———	1	
17	319-974	1	
18	996-722	1	
19	996-247	1	M5 × 12
20	321-371	1	
21	302-459	1	M6 × 17
22	949-678	4	M8 × 35
23	321-346	1	
24	949-610	1	M6 × 10
25	998-844	1	
26	330-768	1	9, 10, 27-34, 40, 41, 43, 44, 46-51, 53
27	321-343	1	
28	312-480	1	
29	949-437	2	M12
30	312-481	1	
31	322-280	1	
32	321-417	1	
33	321-336	1	
34	324-400	3	
35	311-144	1	M6
36	321-331	1	
37	———	1	
38	321-385	1	″37″
39	949-342	1	M6 × 25
40	998-818	2	
41	949-256	6	M6 × 16
42	321-329	1	
43	321-342	1	
44	329-416	1	
45	322-283	1	
46	329-415	1	
47	875-249	2	
48	987-860	1	M6 × 6
49	321-339	1	
50	321-338	1	
51	321-340	1	
52	321-345	1	
53	330-768	1	9, 10, 26-34, 40, 41, 43, 44, 46-51
54	321-672	4	
55	315-210	1	
64	949-457	4	M8
65	949-433	4	M8
71	996-227	2	
72	949-429	5	M4
73	949-215	4	M4 × 8
74	332-818	1	″89″
75	996-276	1	
76	321-332	1	

A	B	C	D
77	961-554	1	M8 × 10
78	302-518	1	″79″
79	984-528	1	P-6
80	949-312	1	M8
81	949-633	1	M8 × 50
82	320-141	1	
83	949-237	1	M5 × 12
84	949-454	1	M4 × 12
85	998-980	1	
86	322-199	1	
87	949-217	1	M4 × 12
88	948-614	1	
89	331-419	1	
90	321-347	1	
91	996-226	2	
92	996-223	2	
93	949-568	2	M8
94	974-500	2	M8 × 16
95	302-459	1	M6 × 17
96	947-859	1	
97	963-174	1	
98	———	1	
99	321-375	1	
100	961-554	2	M8 × 10
101	321-329	2	
102	303-409	1	M8 × 25
103	307-956	2	M6 × 10
104	302-503	1	M6 × 22
105	321-333	1	
106	331-845	1	
107	———	1	
109	322-210	1	
110	949-332	1	M5 × 12
111	322-206	1	
121	938-051	1	
122	937-631	1	
123	984-750	3	D4 × 16
124	321-392	1	
125	305-558	3	D5 × 25
126	321-355	1	
127 1	321-354	1	110V-120V
127 2	322-200	1	220V-240V
128	930-804	1	M4.0
129	321-393	1	
130	301-653	6	D4 × 20
131	880-734	4	M5 × 25
132	321-383	1	
133	959-141	2	
134	980-063	1	
135	322-884	1	″195″
136	321-356	1	
137	949-426	2	M8
138	978-559	2	
139	949-558	2	M8
140	620-1VV	1	6201VVCMPS2L
141	307-731	2	
142	949-322	2	M4 × 10
143	321-357	1	
144	332-810	1	
145	998-868	1	
146	981-373	4	
147	322-207	1	″134, 146″
148	930-703	2	

C10FSB

A	B	C	D
149 2	340-779F	1	230V-240V "148"
150	953-174	2	D5 × 55
151	321-399	1	608VVC2NS7L
152 1	360-898E	1	230V "151, 196"
152 2	360-898F	1	240V "151, 196"
153	946-362	1	
154	945-161	2	
155	999-043	2	
156	960-685	2	
157	938-477	2	M5 × 8
158	322-208	1	"156, 157"
159	996-247	1	M5 × 12
160	998-980	1	
161	998-836	1	M6 × 12
162	318-958	1	
163	949-258	1	M6 × 20
164	606-ZZM	1	606ZZC2PS2L
165	949-455	1	M6
166	949-425	1	M6
167	————	1	
169	304-043	1	M4 × 10
170	977-839	1	M5 × 10
171	321-384	1	
172	————	1	
174	308-789	2	
173	————	1	
175	307-731	1	
176	322-452	1	
177	322-453	1	
178	949-241	2	M5 × 20
179	949-454	2	M5
180	998-335	1	M7 × 17.5
181	949-322	2	M4 × 10
182	308-787	1	"183-186"
183	600-3DD	1	6003DDCMPS2S
184	308-788	1	
185	608-VVM	2	608VVC2PS2L
186	————	1	
187	931-008	1	4 × 4 × 12
188	949-555	1	M5
189	988-821	1	
190	307-732	1	
191	————	1	
192	322-454	1	
193	312-492	1	
195	322-884	1	"135"
196	321-398	1	6201VVCMNS7S
198	976-819	1	
199	322-456	1	
200	302-757	2	
201	935-196	3	M4 × 12
202	322-457	1	
203	322-458	1	
204	306-371	2	D3 × 10
208	305-171	1	
501	940-543	1	10MM
502	998-845	1	
503	974-663Z	1	
601	321-434	1	"602, 618"
602	321-388	1	"603-608"
603	321-551	1	M10 × 54
604	998-836	1	M6 × 11
605	————	1	
606	306-985	1	

A	B	C	D
607	964-851	1	
608	304-043	1	M4 × 10
609	960-017	1	M6 × 32
610	987-860	2	M6 × 6
611	321-552	2	
612	————	1	
613	321-387	1	"609-612"
614	960-017	1	M6 × 32
615	301-806	1	M6 × 15
616	————	1	
617	321-390	1	
618	321-374	1	"614-617"
619	974-561	1	
620	949-404	1	M6 × 20
621	321-390	1	
622	————	1	
623	301-806	1	M6 × 15
624	321-373	1	"614, 621-623"
625	321-549	2	
626	949-313	2	M6
627	949-556	2	M6
628	967-329	4	
629	996-261	2	
630	996-283	2	M6 × 65
631	321-553	1	"614, 619, 620, 625-630"
634	307-713	1	225MM-D25.4 HOLE-NT72

Hitachi Koki Co., Ltd.

005
Code No. C99115015 F
Printed in China